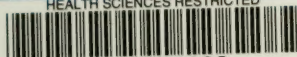


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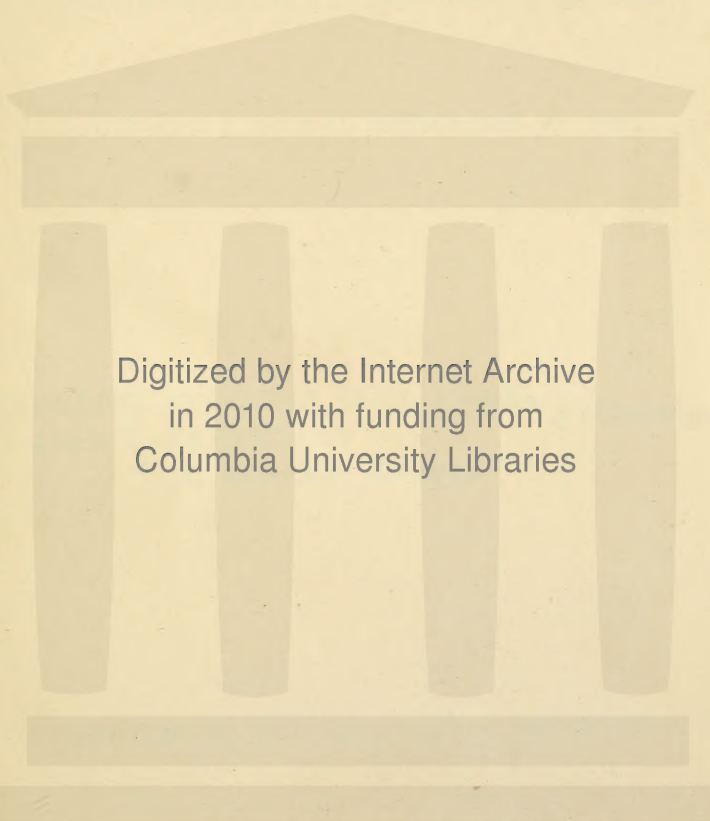
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STATE OF NEW YORK

STATE COMMISSION IN LUNACY

THIRTEENTH ANNUAL REPORT

October 1, 1900 to September 30, 1901

FREDERICK PETERSON, M. D., *President* } *Commissioners*
WILLIAM L. PARKHURST }
T. E. McGARR, *Secretary*

TRANSMITTED TO THE LEGISLATURE FEBRUARY 6, 1902

ALBANY

J. B. LYON COMPANY, STATE PRINTERS

1902

STATE OF NEW YORK

No. 57

IN ASSEMBLY

FEBRUARY 6, 1902

STATE COMMISSION IN LUNACY

THIRTEENTH ANNUAL REPORT

STATE OF NEW YORK

STATE COMMISSION IN LUNACY

ALBANY, *February 6, 1902*

To the Speaker of the Assembly

By direction of the Commission I have the honor to transmit herewith the annual report of the State Commission in Lunacy for the year beginning October 1, 1900, and ending September 30, 1901.

T. E. MCGARR

Secretary

STATE OF NEW YORK

STATE COMMISSION IN LUNACY

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THIRTEENTH ANNUAL REPORT

ALBANY, *January*, 1902

To the Legislature

In compliance with section 9 of chapter 545 of the laws of 1896, constituting chapter 28 of the general laws, which requires that "the Commission shall annually report to the Legislature its acts and proceedings for the year ending September 30th last preceding, with such facts with regard to the management of the institutions for the insane as it may deem necessary for the information of the Legislature, including an estimate of the amounts required for the use of the State hospitals and the reasons therefor, and also the annual reports made to the Commission by the board of managers of each State hospital and by the State Charities Aid Association," the State Commission in Lunacy herewith presents its thirteenth annual report, covering the fiscal year beginning October 1, 1900, and ending September 30, 1901.

Two changes have occurred in the personnel of the commission in Lunacy during the past year. Dr. Peter M. Wise retired in December last after thirty years' continuous public service among the insane of the State, twenty-five as assistant physician and superintendent respectively of the Willard and Ogdensburg State hospitals and four as a member of the State Commission in Lunacy. His place was filled by the appointment in May of Dr. Frederick Peterson, of New York.

William Church Osborn, the legal member of the Commission, resigned in June after two years of invaluable and painstaking service, to the very great regret of all who were in any way associated with him in the work of caring for the insane. The vacancy had not been filled before the close of the fiscal year.

FREDERICK PETERSON, M. D.	} <i>Commissioners</i>
WILLIAM L. PARKHURST	

REPORT

GENERAL OPERATIONS

The whole number of committed insane in the State, public and private, on September 30, 1901, was 24,314. The whole number of insane in State hospitals, including the inmates of the Matteawan and Dannemora hospitals for insane criminals (733 patients) on September 30, 1901, was 23,387. The whole number of insane in licensed private institutions was 917. The net increase for the year in all institutions was 536; in the State hospitals, 566.

RECEIPTS AND EXPENDITURES

RECEIPTS

The receipts from all sources for the support of the State hospital system, the State Commission in Lunacy and the Pathological Institute for the fiscal year ending September 30, 1901, were:

1 Receipts from State treasury for maintenance.	\$3,766,000 00	Financial exhibit
2 Receipts from State treasury for new buildings and improvements of State hospitals.....	750,000 00	
3 Receipts from State treasury for maintenance of State Commission in Lunacy and Pathological Institute	90,600 00	
4 Receipts from board of private and reimbursing patients, sale of old materials, etc.....	280,253 26	
Total receipts	<u>\$4,886,853 26</u>	

The expenditures for the same period were:

1 Cost of maintenance, including officers' salaries, employees' wages, clothing, food, ordinary repairs and all incidental expenses comprising "fixed charges" of the hospitals (\$167.70 per capita).....	\$3,766,615 49
2 Expenditures on account of new buildings to be occupied by patients and employees.....	472,487 77

3	Expenditures for new buildings other than those occupied by patients and employees..	\$104,445 85
4	Expenditures for extraordinary repairs, renewals and improvements and furniture, not included in fixed charges or maintenance.....	242,456 19
5	Expenditures for maintenance of the Commission, the Pathological Institute, deportation of aliens and non-residents, salaries and expenses of special agents.....	86,244 90
Total expenditures		<u>\$4,672,250 20</u>

MOVEMENT OF PATIENT POPULATION

The average number of patients in State hospitals during the fiscal year was 22,463. The whole number of admissions, including transfers from one institution to another, was 4,916. The whole number of original admissions from homes, poorhouses, etc., on commitment exclusive of transfers, was 4,561. The whole number discharged, including transfers to other institutions, was 2,837. The whole number of deaths was 1,868.

The number discharged is divided as follows:

Recovered, 1,209; transferred to other institutions, 355; discharged in an improved condition and to the care of friends, 821; as unimproved to public officials, including aliens and non-resident patients removed from the State, 407; not insane, 45.

PERCENTAGE OF RECOVERIES

Recovery
and death
rate

	Per cent
On the number admitted from homes, etc., on original commitments and exclusive of transfers from one institution to another	26.5
On the daily average population.....	5.38
On the number discharged, including deaths, but excluding transfers to other institutions.....	27.8
On the number discharged, excluding deaths and transfers to other institutions.....	48.7

PERCENTAGE OF DEATHS

	Per cent
On the number admitted from homes, etc., on original commitments.....	40.9
On the daily average population.....	8.30

Further reference may be had to the above subjects in the separate chapters, where they are treated more in detail, and in the statistical tables.

PROVISION FOR THE DEPENDENT INSANE

It should be a matter of congratulation to the citizens of the State that in this the first year of the twentieth century every dependent insane person within its borders is receiving the benefits of State care with all that is implied by the term, scientific medical treatment, skilled nursing, the most approved sanitation, and every structural, medical and surgical appliance tending to his comfort and restoration to health and wage-earning capacity. Furthermore, funds have been provided by the State to enable the Commission to relieve the congestion in hospital wards which resulted from the inclusion in 1895 and 1896 of the insane of the counties of New York and Kings as part of the State system, as well as to permit of the abandonment of the inappropriate and unsatisfactory buildings occupied since then on Blackwell's and Hart's islands and their reversion to New York city. Within six months from the writing of this report the colossal colony at Central Islip, Long Island, will be entirely finished, and the Commission can report that so long as the Legislature continues hereafter to provide accommodations to meet the net annual increment in the numbers of patients, overcrowding as a theme for critics of the State care system will be a thing of the past. There will then remain the problem of providing for the 1200 insane temporarily housed in leased buildings at Flatbush.

Completion
of buildings
at Central
Islip

Some idea of the magnitude of the work imposed upon the Commission in consummating this end may be gained from a perusal of the appropriation acts of the last five years.

Thus the cost of the buildings comprising the Central Islip colony and its equipment, with accommodations for 2500 patients, will reach \$1,325,000, and the new building on Ward's Island, finished last year and designed especially for recent or acute cases, with its equipment will not fall short of \$184,248.29.

The Legislature during the session of 1901 provided \$750,000 for the completion of the colony and for the erection of an additional wing for the Gowanda State Hospital, and for the commencement of a new group of buildings in connection with the Rochester State Hospital. After consultation with the Executive, the plans of these buildings were altered to provide for three instead of two-story structures with the proviso that they should be semi-fireproof. Contracts have been let to the lowest responsible bidders in each instance. It is expected that considerable progress will have been made in the erection of both groups before this report is submitted to the Legislature. The Gowanda buildings are designed to accommodate 538 patients, and it is estimated that their total cost, including equipment, will be \$227,000. The new group at Rochester will, with its equipment, cost \$458,000, and will accommodate 994 patients.

COST OF MAINTENANCE AND BUILDINGS

Since the transfer to the care of the State of the dependent insane, and the legislative enactments of 1895 giving the Commission complete control of the disbursement of all moneys appropriated for buildings or maintenance, there has been a not unexpected expression of surprise on the part of unthinking and prejudiced persons that so large a sum of money as three or four millions should be required annually for ordinary and extraordinary expenses on account of this afflicted class. That the sum appropriated is not excessive when the fact is taken into consideration that it maintains and houses comfortably nearly 28,000 people, and in addition provides for an annual increase of from 600 to 700 persons, must be manifest. While during the year 1901-2 the insane population of the hospitals will amount to but 23,000, the number of officers and employees

also receiving food and medical supplies and commutation allowances during the year will not fall below 4400. To state the case briefly: The amount available for these supplies for the coming year is \$1,158,983.46; the total number of persons to be maintained therefrom is 27,400. If we divide the estimated expenditure by the number of persons to be supported thereby, we have a per capita for food and medical supplies of \$124.09 or \$2.38 per week, which added to other maintenance items will reduce the total per capita cost to \$157.70 per annum, or about \$3 per week. Captious critics may claim that this is a novel method of calculation. The Commission grants that it is not the one ordinarily followed, but it asserts that in so far as this large number of employees required for the proper conduct of the hospitals receives maintenance, or an allowance in lieu of maintenance, it should be considered as a factor in the calculation of the per capita charge.

During the year just closed the gross cost per capita of maintenance charges, as shown elsewhere, was \$167.70—a rate slightly higher than that which prevailed during the preceding year, owing to the enhanced cost of coal and other supplies, requiring a total disbursement of \$3,766,615.42. Of this amount, however, the sum of \$280,253.26, an amount equal to \$12.48 per capita, was received for the board of private patients, sales of old material, etc., and applied upon this amount, reducing the actual per capita cost to the State to \$155.22 per annum, or a trifle under \$3 per week.

Higher per
capita rate

The Commission is now able to announce that a material reduction in the amount appropriated for buildings might properly be made by reason of the fact that the Central Islip Colony is practically finished, and that provision has been made in part for the probable increase in the number of the insane to the close of the fiscal year 1902. While an annual reduction of \$250,000 in the item for buildings and extraordinary improvements has taken place since 1899, the appropriation of 1901 having been \$750,000, the Commission believes that the sum of \$300,000 required to finish the pending building operations at

Reduced ap-
propriations for
buildings
and extra-
ordinary
repairs

Rochester and Gowanda, together with an amount equal to one per cent of the value of the present hospitals and their equipment—which would amount to \$240,000—to be expended in keeping the plants in proper repair and meeting contingencies should be sufficient for the current year, and the Commission would recommend that these two sums be granted by the Legislature. The Commission confidently expects that a further reduction of \$250,000 in the sum annually appropriated for buildings and improvements will be possible when the additions to the Rochester and Gowanda hospitals are completed, and provision has been made for the patients remaining in the Flatbush hospital which reverts to the county of Kings in 1905.

As to maintenance, while the ordinary addition to the dependent insane population of the State amounts to some 600 annually, which at the rate of \$165 per capita per annum would necessitate an annual increase in the gross amount appropriated of \$99,000, the Commission believes that by the exercise of rigid economy it will be able to meet all requirements, with one exception, if the same amounts are appropriated in 1902 as were allowed in 1901. The Commission refers to the item of wages of hospital employees. The Commission acquiesced in a reduction in this item in 1901 to \$1,160,000, having at that time a balance on hand applicable to this fund of \$58,000, which it hoped would, with economy, enable it to meet all demands. This balance will be exhausted before the close of the present fiscal year, and in the preparation of the appropriation bill for the year beginning October 1, 1902, the Commission must remind the Legislature that a considerable increase over the amount granted in 1901 should be allowed if the hospitals are to continue their proper functions—the care and *cure* of the insane. It must not be forgotten that two years ago a very material reduction was made by the Commission in the working force of the State hospitals, amounting in some institutions to 17 per cent. The gross amount expended in 1899 for wages was \$1,344,836.69, while in 1900 it was \$1,210,304.55, a reduction of \$134,000. So-called economy, resulting in a further reduction

Decrease in
staff of
nurses and
employees
unadvisable

in the number of employees and thus affecting proper supervision of the insane during working hours, looking to their safety and comfort and obtaining the best results from their carefully directed labor, providing proper night service for the violent, dangerous and suicidal patients and skilled and kindly nursing of the physically sick and disabled, is, in the opinion of the Commission, entirely miscalled. The Legislature is therefore most earnestly requested to increase the appropriation for the hospital employees and nurses—amounting to 4,270 persons—to \$1,250,000. The total disbursement under this head for the year just closed was \$1,236,000 and would, with the usual schedule increases due to length of service and the ordinary additions to the pay-rolls caused by the requirement of supervision for the additional number of insane to be cared for, increase during 1902 to \$1,250,000, and during the succeeding year (for which the Legislature is about to make provision) to \$1,264,000. The Commission hopes, however, by strenuous efforts to reduce this amount by \$14,000, but believes that any further reduction will most assuredly cripple the service and render abortive the efforts now being made to bring about a constantly increasing number of recoveries.

RECOVERIES

A notable and gratifying increase in the recovery rate during the past year (the percentage based on the admissions being 26.5 as against 23.7 during the preceding year) will be observed by a perusal of the statistical tables bearing upon this matter. It is perhaps too early to claim that the enhanced number of recoveries is assignable either to more scientific medical treatment, improved hospital facilities, higher standard of care, or a more appropriate dietary for the insane. Considering the fact now universally conceded that the fatal forms of mental disease, general paresis, etc., figure to a far greater extent than formerly in the annual admissions this result is most satisfactory. The Commission expects a still higher ratio of recoveries as soon as the hospitals are able to report that sufficient space

Increased
number of
recoveries

is available to classify properly their patients and sufficient funds have been granted to apply effectually the most approved therapeutic appliances, as these are developed from time to time.

**Financial
advantages
of restoring
patients to
sanity**

In previous reports the Commission has dwelt upon the enormous financial advantage involved in the complete restoration to wage-earning capacity of every person committed to State institutions. Since each patient who fails to recover or to improve sufficiently to enable him to reside outside of an institution ultimately costs the State several thousand dollars for housing and maintenance, it will readily be seen that the 180 additional recoveries reported during the year just closed as compared with the preceding year represent an enormous ultimate saving. Political economists prone to regard expenditures on behalf of the insane in this and other States as extravagant and unjustifiable should bear these facts in mind. They should moreover direct their attention, not so much to the small annual increase in the hospital appropriations due to the necessary additional accommodations for the insane, but to the results of treatment, the decreasing annual increment, and to the added satisfaction and contentment not only of the patients, but their relatives and friends as well, which has been of late so noticeable. Persons familiar with conditions existing in this State fifteen or twenty years ago, when legislative inquiries were ordered almost annually to investigate charges of neglect, maladministration, and even misappropriation of State funds, must certainly admit the immensely improved condition of the insane and their environment; and it is to be hoped that the Empire State will not be obliged by reason of inadequate appropriations to yield to others the proud position it has occupied in the forefront during the past twelve years in the care and treatment of the insane.

ALIEN AND NON-RESIDENT PATIENTS

The Commission has during the last year pursued its usual vigorous policy in the removal outside of the borders of the State of such non-resident and alien lunatics as have found temporary domicile in either local or State institutions. It has been the invariable custom of the Commission to establish clearly the legal residence of each patient of this class in a given state or country before removal or deportation is attempted; yet by means of diplomatic correspondence and offers of financial cooperation in the return of these persons scarcely a single failure can be reported in the Commission's efforts along this line since 1893, when this delicate task was first imposed upon it. As to the deportation of aliens, the usual embarrassments have arisen with the steamship lines, reluctant at all times to accept this undesirable class of passengers unless accompanied by trained nurses, and even the provisions of this safeguard does not at all times insure their acceptance. Nevertheless the following statement will show that these difficulties have been successfully surmounted:

**Difficulty of
deporting
aliens**

During the year 168 alien and non-resident insane persons have been removed outside the State. Of these 103 were deported to foreign countries as follows:

Austria, 4; China, 1; Denmark, 2; England, 11; France, 5; Germany, 19; Holland, 4; Ireland, 14; Italy, 9; Norway, 4; Russia, 7; Scotland, 5; Sweden, 5; Canada, 5; Bohemia, 3; Poland, 3; Finland, 1; Belgium, 1. The remaining 65 were sent to other states.

In perhaps no other way has the State secured financial advantages equal to those attained by the removal of non-resident lunatics. It costs the State \$500 per capita to house each insane person, and \$167 per annum to maintain him. As the average life of the insane is about twelve years, it requires but a moment's computation to show that an ultimate saving to the State of nearly half a million dollars was accomplished in the removal of these 168 non-residents.

**Efforts to
facilitate
deportation
of defectives**

It will not seem amiss at this time to refer to the efforts made by the Commission during the past year under the authority granted by chapter 460 of the laws of 1897, which provides with regard to the deportation of this most undesirable class: "The Commission is hereby authorized to secure legislation from Congress to more effectually provide for the removal of alien and non-resident insane," to secure a modification of the United States Immigration Law. Goodwin Brown, a former Lunacy Commissioner, represented the Commission before the immigration committees of both branches of Congress, and appeared also before the United States Industrial Commission, urging a change in the existing immigration laws to require inspection of immigrants at ports of departure to determine whether by reason of inherited or acquired mental instability they were likely to become public charges upon arrival in the United States, and to permit their removal if at any time within two years after arrival they become insane or dependent. A bill comprising these suggestions, after passing the lower house of Congress, failed by reason of lack of time to pass the Senate during the last session. It is the purpose of the Commission to have this bill reintroduced and urged for passage during the forthcoming session of Congress. Tragic events which are fresh in the minds of our citizens will, the Commission doubts not, serve to act as a spur upon Congress to enact legislation limiting the entry through American ports of the offscourings of Europe. The city and State of New York fare much worse than any other part of the country from existing immigration laws, which would almost seem to have been enacted in the interest of steamship companies. An examination of the lists of persons committed as insane to the hospitals receiving the insane of New York city shows a great preponderance of markedly foreign names—Russian, Polish, Sicilian, Hungarian, Roumanian. That lunatics of foreign birth are being committed to the New York institutions in a rapidly increasing ratio is shown by an examination of the admissions to the New York institutions. For the fourteen years ending September 30, 1901, nearly 70 per cent

of all the patients admitted were of foreign birth. How burdensome this heavy load has become to the taxpayers of the State is shown by the unrest of representatives of rural communities in the State Legislature, and the tendency annually manifest to reduce the fixed charges for maintenance and housing of the dependent insane. The Commission can only reassert that, within statutory limitations, it is removing every non-resident and alien not lawfully entitled to the State's paternal care in time of distress, and express the hope that criticism of the State care system may be withheld until the work now pending is brought to completion by affirmative action of Congress.

INSPECTION OF THE STATE HOSPITALS

During the year Governor Odell, accompanied by Chairman Higgins of the Senate finance committee, Senator Ellsworth, President pro tem. of the Senate, Speaker Nixon, Chairman Allds of the Assembly ways and means committee, and Assemblyman Kelsey, visited every hospital in the State, with the exception of those located on Ward's and Blackwell's islands and at Flatbush. The commission hopes and believes that as a result of this inspection its constant and strenuous effort to enforce economy in the disbursements for maintenance and buildings will be upheld.

The following quotations from a circular addressed last year by the English lunacy commissioners to asylum authorities in Great Britain, Ireland and Wales so clearly voices the sentiment of this Commission upon the question of housing the dependent insane that it is here inserted:

"In view of the rapid increase in the price of labor and materials, and the corresponding cost of asylum construction, we think it necessary to urge the need of such strict economy in the building, finishing, fitting and furnishing of asylums as is compatible with the adequate discharge of the objects which are contemplated in their provision, namely, the cure of those who may recover, and the safety and comfort of those whose prospects may be less hopeful.

Recommendations of English lunacy commissioners as to construction of suitable buildings

"While it is necessary to provide solid and substantial structures of adequate but not superfluous strength, and cheerful and comfortable accommodations suitable for the classes of persons who are to be housed and treated within them, all extravagant and therefore unsuitable decoration, both inside and out, should be carefully avoided."

DEVELOPMENT OF THE ESTIMATE SYSTEM

The First Annual Conference of Charities, representing charitable and allied associations of the State, was held in Albany on the 20th, 21st and 22d days of November, 1900, the Commission being represented by former Commissioner Wise and Commissioner Parkhurst. From Dr. Wise's notable paper presented at the conference, entitled "The Cooperative System for Charitable Institutions," the following portions are selected as presenting a résumé of certain financial problems, the solution of which have required much time and earnest study on the part of the Commission:

Extract from
Ex-President
Wise's
paper

"It is now, broadly speaking, five years since the State, with the laws transferring the New York and Kings counties asylums to the lunacy system, under the provisions of the State care act, gathered under its care and support all the institutions maintained for the dependent insane. This law, which will ever stand as a monument of the progressive spirit of our commonwealth, was revolutionary in its treatment of supervision and management of the institutions within the jurisdiction of the State Commission by transferring from local boards of managers to the Commission powers which had heretofore been held by the former, especially the power of directing and determining expenditures. It must be admitted in light of custom and practices which had held from time immemorial, that the functions bestowed upon the central supervisory body seemed arbitrary if not autocratic; yet legislative requirements submitted the acts of the Commission to such clear public view as to make a safeguard far exceeding any previous checks in a public service.

"The power of enforcing cooperation has proved to be the most valuable, I believe, of all the functions bestowed upon the Commission. Metaphorically speaking, the hospitals have put their heads together—perforce, perhaps—have reasoned together, have instructed each other, and finally have done for all

what has seemed by consensus of opinion and experience to be the best for any one. The principle has been that if a certain process is advantageous on Long Island, it should be of equal advantage at Buffalo, and although there are exceptions to this rule, they are marvelously rare. It is almost incredible how widely the hospitals differed from each other in administrative detail when it is considered that the functions of all were precisely alike—when the creation, the purpose, the design and the practice of all were to the same ends; and it cannot be said that in time they would have come together and would have perfunctorily reached the same results as now obtain, for experience shows that no progress had been made in that direction during all the years when opportunity existed. It is not my purpose to criticize the former administration of State hospitals, for this would mean in my estimation undeserved criticism. I believe there were institutions as economically administered and as purposeful before as since enforced cooperation; but I do mean, and I state it fearlessly, that the average, the whole, has been leavened by the best found in each, and herein lies the meat of the whole matter. Apply what is best to all. Formerly each builded largely on its own experience. Now the best wherever found is applied to the whole.

“An experiment in closer cooperation than has heretofore been attempted has recently been adopted by five State hospitals in and near New York city. They have formed what might be called a copartnership for the purchase of supplies. They have but one purchasing officer, whose office is in New York city, and whose function is to purchase all the supplies for the five institutions. It is assumed that practically the same kind and variety of supplies are used by them all, and the only labor in addition to purchasing for one institution is in the quantity bought. As this officer is relieved from the other services required of stewards, he is able to give more attention to purchasing; has the opportunity of watching the market and taking advantage of commercial fluctuations. It is also intended that he shall maintain a bureau of information for all the other hospitals in the department; instruct their stewards from time to time of opportunities which the markets offer, and act for them if occasion demands. This officer will be prepared and equipped to answer inquiries promptly and to the best advantage, and thus relieve the stewards from embarrassment, loss of time and transportation expenses. It may be asked why this cooperative plan is not adapted to all the institutions in the department, but at the present time such an arrangement is neither feasible nor desirable and may never be. Moreover, the joint contract system effects the same economical results which

Cooperation in purchase of supplies

could only be hoped for by creating another great institution, and escapes its possible dangers. There can be no reasonable doubt, however, that its application to the institutions named will give economical results, besides other advantages, although it has not yet passed the trial period and is not an established innovation."

EPIDEMICS IN STATE HOSPITALS

At the Binghamton State Hospital an outbreak of typhoid fever occurred during the winter of 1900, and reappeared during the month of August, 1901. Twenty persons and thirteen attendants were attacked, and four patients and two attendants died. A change from river to well water for drinking purposes has resulted in a cessation of the epidemic.

The Commission regrets to be obliged to chronicle the continuance of the epidemic of diphtheria at the Willard State Hospital, first mentioned in its last report.

Different theories have been advanced in explanation of the presence of this disease, and it has been asserted with great vehemence by the local hospital authorities that it was due to the contamination of the water supply of the institution. At the request of the Commission the eminent bacteriologist, Dr. Herman Biggs, of New York, has recently made a preliminary examination of the water supply, but he has frankly admitted that a simple bacteriological examination would prove nothing, and has urged the Commission to arrange for sustained and comprehensive examinations to be made by competent chemists and bacteriologists, who should be assisted in their work by an engineer of acknowledged ability. With the approval of President Schurman, of Cornell University, the Commission requested Prof. Moore, Prof. Caldwell and Prof. Fuertes, representing respectively the bacteriological department, the chemical department and the engineering department of the university, to co-operate in the settlement of this most perplexing question. Their report will, it is believed, determine fully the status of the water supply, and solve the entire sanitary problem at the Willard State Hospital.

Present hospital authorities disclaim this view but believe defective water supply may be a contributing cause.

SEPARATE PROVISION FOR ATTENDANTS AND NURSES

The Commission believing thoroughly in the desirability of giving nurses and attendants in immediate contact with the insane complete relaxation and freedom from their ordinary surroundings during a considerable period in each twenty-four hours has expended during the past year the sum of \$41,070.33 for the erection and equipment of a nurses' home in connection with the Rochester State Hospital. The building will accommodate 60 nurses of each sex, and will to some extent relieve the congestion which has prevailed for the past two years in the wards of that hospital.

The Commission is of the opinion that this system of separate homes for nurses could with advantage be extended to other institutions, notably at Kings Park and at Gowanda, where no buildings of this character have been provided. The location of these hospitals on farming colonies remote from large centers of population, while presenting the very desirable feature of complete change of scene and rest for the overworked brain workers of the city, does not present a particularly inviting environment for nurses or attendants whose opportunities for enjoyment are necessarily curtailed, and who in addition are compelled to spend practically all of the twenty-four hours in the wards. Accommodations for this class of employees consisting of frame buildings so arranged as to permit of their extension can be provided at an average per capita cost of \$300, and by such provision the accommodations of the hospitals themselves can be very materially increased at a not excessive cost of construction.

Nurses
homes rec-
ommended

DANNEMORA STATE HOSPITAL

On the 15th day of November, 1900, the new Dannemora State Hospital for Insane Convicts, established by chapter 520 of the laws of 1899, was opened and before the close of the year 111 patients had been received by transfer from the Matteawan State Hospital for Insane Criminals, which was thus, in a measure, relieved of the dangerous congestion which has for

some years past made its administration exceedingly difficult. In addition, 31 patients were received direct from the State prisons and reformatories. Appropriations have been made by the Legislature for the extension of the Dannemora Hospital, and it will undoubtedly prove a valuable adjunct to the State prison system. The Superintendent of State Prisons has appointed Dr. Robert B. Lamb, formerly first assistant physician at the Matteawan State Hospital, as medical superintendent of the new institution.

THE PATHOLOGICAL INSTITUTE

**Removal of
institute**

A reorganization of the Pathological Institute was rendered necessary by the resignation of the director, Dr. Ira Van Gieson, June 1, 1901, and by the removal of the institute from its quarters at 1 Madison avenue, New York city, to a building attached to but quite independent of the Manhattan State Hospital at Ward's Island, West. The removal to Ward's Island is a temporary expedient until such time as a reception hospital can be established in New York city on Manhattan Island, and places the institute in close connection with some clinical material at once.

**Appoint-
ment of new
director**

The plan of reorganization required the appointment of a new director, and this implied the necessity of resignation of all of the former director's assistants in laboratory work in order that the new director should assume the responsibility of the work by making his own selection of collaborators either from the men already employed or from other sources as seemed desirable to him for the best interests of the work to be undertaken. The plan does not mean the destruction of the Pathological Institute, as has been intimated in some quarters. The scheme of a collaborative study of the causes and methods of cure of insanity by various investigators representing the different sciences of psychiatry, which was developed by Dr. Van Gieson during the past few years under the inspiration of Dr. Carlos F. Macdonald, ex-Commissioner in Lunacy, is to be carried out as before, only under new auspices, with a new staff of scientists and in closer affiliation with clinical material. The purpose

being the same, the collaborative study of the causes and methods of cure of insanity and the plan of cooperative investigation by different specialists being similar to that of the institute in past years, the Commission fails to see how a change in personnel of the director and assistants is to affect the future of the laboratory. The saving in rental and the juxtaposition of the institute to the clinical material are an important feature of the reorganization.

In order to add to its efficiency careful thought was given to the matter of the appointment of an advisory board, whose duty it should be to aid in the development of the institute and the carrying on of its work on broad lines, and by its valuable advice to assist the new director who was soon to be appointed. It is the aim of the reorganized institute to carry on work in the sciences correlated with psychiatry much according to the original scheme, but with a few modifications calculated to meet more immediately the needs of the hospitals as expressed by the superintendents, and to meet some of the criticisms of the former plan. Original research in the various sciences having a bearing upon the subject of insanity will go on as before, but in addition thereto the institute will be utilized to give special instruction in clinical psychiatry as well as methods of scientific research to the physicians on the staffs of the hospitals for the insane and to young men about to take up an asylum career. In order to obtain this clinical experience the institution needs to be combined with a hospital for the insane, and to bring this about it is for the present to be connected with one of the asylums on Ward's Island, and until such time as a reception hospital for the insane can be established in Manhattan.

In selecting the members of the advisory board the Lunacy Commission deemed it expedient to have the three university medical schools of New York city represented, viz.: Columbia, Cornell and Bellevue University. Furthermore, it was considered proper to accord the chief sciences correlated with psychiatry representation upon the advisory board. These sciences are

pathology, chemistry, psychology and general biology. Inasmuch as the Pathological Institute was created for the utilization of the material of all the State hospitals, and for the purpose of raising the standard of scientific study, treatment and care of the insane under State care, it was thought best that these institutions should also have a voice upon the advisory board. A member to represent general clinical medicine and neurology was likewise selected.

Accordingly the Commission in Lunacy has established an advisory board consisting of the following gentlemen:

J. McKeen Cattell, professor of psychology, Columbia University.

James Ewing, professor of pathology, medical department of Cornell University.

Christian A. Herter, professor of pathological chemistry, Bellevue and University Medical Colleges.

Hermon C. Bumpus, Director of the American Museum of Natural History, to represent the department of general biology.

Henry Hun, professor of the diseases of the nervous system, Albany Medical College, to represent neurology and general clinical medicine.

Dr. Charles W. Pilgrim, superintendent of the Hudson River State Hospital, at Poughkeepsie.

Dr. A. E. Macdonald, superintendent of the Manhattan State Hospital, East, to represent the State hospitals.

Dr. Frederick Peterson, president of the Lunacy Commission, a member *ex officio*.

All of the appointments to the advisory board are permanent, except two. The two superintendents of asylums on the board were elected by the fourteen asylum superintendents of the State at a meeting held in Buffalo, September 28th. for a term of two years only, thus permitting all of the asylums to be represented in rotation on the board.

All of the gentlemen selected have accepted their appointments. They serve the State without charge, willingly giving

their time and services free for the cause of science and to advance the interests of the insane.

After a long search for a scientist capable of filling the position of director of the Pathological Institute, the Commission appointed Dr. Adolf Meyer, of the State Hospital and Clark University at Worcester, Mass., the Civil Service Commission having after a competitive examination certified to his eligibility.

Dr. Meyer was born in 1866 at Zurich, Switzerland. A graduate of the Zurich Gymnasium, he studied medicine at the University of Zurich from 1885 to 1889, under the guidance of Prof. Klebs, Forel, et al. During a year of post-graduate studies in Paris, Edinburgh and London he devoted his attention more and more to neurology, and on his return to Zurich he worked in the laboratory and clinic of Prof. Forel, and in 1892 he published a study on the "Forebrain of Reptiles." After a sojourn in Vienna and Berlin, and another month with Prof. Dejerine in Paris, he went to Chicago, and from 1893 to 1895 he was pathologist at the Illinois Eastern Hospital for the Insane and docent in neurology at the University at Chicago, until he was called to Worcester, Mass., as director of the clinical work and laboratory of the Worcester Insane Asylum and docent in psychiatry at Clark University. In 1896 he made an extensive study of insanity in Europe, especially under Prof. Kraepelin at Heidelberg, and since then he has carried out the plan of combining scientific laboratory research with the practical clinical work of a large hospital for the insane at Worcester.

Qualifications of new director

The most important of his later publications are: "A Clinical Review of the Data of Neurology," "Journal of Comparative Neurology," volume 8, parts 3 and 4, and a study of a new form of degenerations in the central nervous system, published in "Brain," 1901.

In June, 1901, at the four hundred and fiftieth anniversary of the University of Glasgow, the degree of LL. D. was conferred on him as delegate of Clark University.

It is felt that with a new director of the attainments of Dr. Meyer, both in pathology and in experience among the insane, and with an advisory board constituted of such men as are named above, the plan of work of the institute will be organized on a basis which should be satisfactory to the medical profession, to the physicians in the State asylums for the insane, to the various universities of the State, to scientists in general, and last but not least to the taxpayers who support the institute and who deserve to expect from it results that shall be of practical value in the care, treatment and cure of the insane. Dr. Meyer is to be left free to select his assistants in the various departments of the laboratory work, but will be assisted in this selection by the advisory board.

TRAINING SCHOOL FOR NURSES

The State has for many years maintained a training school for nurses in the State hospitals of each of the following localities:

Utica, Willard, Poughkeepsie, Middletown, Buffalo, Binghamton, Ogdensburg, Rochester, Gowanda, Kings Park, Brooklyn, New York city and Central Islip.

The training given in these schools is in the main the same as that given in general hospitals. While these are hospitals for the insane, it must be remembered that in such large institutions there are many persons sick at all times, with various other diseases besides brain diseases, and a great many surgical operations are performed. In fact, the majority of insane persons have some physical disorder requiring treatment. Thus there are hospital wards and infirmaries, well equipped operating rooms, nurses' kitchens, and the like as in general hospitals. The course of instruction therefore consists of a curriculum like that of general hospitals, comprising lectures and recitations; elementary anatomy, physiology and pathology; besides teaching as to the care of the sick and preparation of food for invalids; massage, bandaging, electricity, and the taking of temperature, pulse and respiration; hygiene, ventilation, asepsis

and antiseptis, and methods of assistance in surgical procedures. A nurse graduating from any one of these schools should be well fitted for advanced positions in the hospitals or for private nursing of the insane. These schools were originally designed for the purpose of improving the methods of nursing in the hospitals themselves, and the result has been a very gratifying advance in the care of their charges. There is a considerable demand now for the graduates in fields outside of the asylums, for the nursing of the insane in private homes, particularly in districts remote from the large cities.

The Commission has decided to keep a list of the graduates of the State hospital training schools, containing names, addresses and dates of graduation, on file at the office of the Commission in Albany, in order that physicians in any part of the State may be furnished on application with the names of the nurses in the neighborhood for use in cases of insanity or other illness that are being treated at home. Both men and women are trained in these schools.

Applications for admission to the training schools of the State hospitals may be made to the superintendent of any one of the institutions mentioned above, or to the secretary of the State Commission in Lunacy, Albany, N. Y., who will file the applications and furnish lists of the same to the various hospitals from time to time as desired by them and when there are vacancies to be filled in the schools. Blank forms of application will be sent to any address by writing to the superintendent of any of the hospitals or to the office of the Commission in Albany.

Applica-
tions for ad-
missions to
State hos-
pital train-
ing schools

ACCIDENTS AND ASSAULTS UPON PATIENTS AND ATTENDANTS

The Commission is obliged to chronicle a number of serious accidents in the State hospitals during the year.

At the Willard State Hospital a veteran employee named Martin was instantly killed by the breaking in two of a heavy freight train, which was ascending a steep grade, the latter half

crashing through the side wall of the electric light station and striking Martin, who was employed as fireman, with tremendous force.

At the same hospital two suicides occurred; a male patient secured and used an attendant's razor with fatal effect; and a woman patient, having eluded observation, jumped into the lake.

At the St. Lawrence State Hospital a patient succeeded in leaving the hospital grounds and two days later was found suspended from a tree on a farm not far distant from the institution. In this case there was no history of suicidal impulse.

At the Manhattan State Hospital, West, a woman patient succeeded in fastening strips of bedticking together and making therefrom a stout cord, one end of which she succeeded in fastening to the window guard of her room, tying the other end about her neck and thus strangling herself. This patient was convalescing and had given no evidence of suicidal intent for many months.

SPECIAL PROVISION FOR PULMONARY CASES

Solarium for
women,
Ward's
Island

During the year special provision has been made by the Commission for the isolation and treatment of the insane committed from New York city and found to be suffering from tuberculosis. The Commission allotted \$4,080.08 for the erection in the women's division of the Manhattan State Hospital of a completely equipped solarium, a two-story building, the upper story being used as a dormitory where the incipient and more favorable cases are allowed to sleep. Special construction permits the maximum of fresh air to circulate, and the temperature is not materially higher at any hour of the night than that prevailing outside. The lower floor is used as a day room for patients when compelled by inclement weather to remain indoors. In fair weather the stimulating rays of the sun are thus at all hours of the day accessible both within doors and out.

Naturally it is a matter of paramount importance to have *all* patients live as far as practicable in the open air, and with

this end in view, the Commission finding during the year that the isolation wards of the men's division of the Manhattan State Hospital were becoming somewhat overcrowded, allotted the sum of \$1,019.71 for the purchase of two large and a few smaller tents, with suitable flooring, stoves and facilities for dining and service rooms, to which the superintendent of the hospital transferred some fifty patients, including twenty belonging to the demented and untidy class. Very satisfactory results at once followed. Patients who while confined to the wards presented an appearance of hopeless dementia brightened up and began to manifest considerable interest in their novel surroundings, appreciating particularly the freedom from crowding and other depressing features of ward life. Many showed great gain in weight and amelioration of the pulmonary symptoms.

Provision of
tents,
Ward's
Island

The Commission believes that the plan thus outlined might with propriety be tried at other points in the State, at least during the summer months, and that even apparently hopeless cases would be improved by such a change in environment.

BI-MONTHLY CONFERENCES

As required by the statute, the Commission has held conferences every two months with representatives of the State hospitals concerning the betterment of the medical service in these institutions, the improvement of the system of purchasing supplies, possible economies in wage account and various matters of administrative detail. In order to obtain the best results of experience the Commission has from time to time appointed special committees of hospital superintendents and stewards to inquire into and report upon the advantage of changes suggested in these conferences looking to the simplification or improvement of the medical or business administration of the hospitals.

THE COLONY SYSTEM

With the enlargement of the Rochester and Gowanda hospitals during the coming year, these institutions will have attained the size of most of their sister hospitals, and the Commission, as required by the statute, will be obliged in order

"to prevent overcrowding in the State hospitals" to "recommend to the Legislature the establishment of other State hospitals." The question at once presents itself: Shall the policy of erecting large congregate buildings be followed, or shall those designed upon the cottage plan be recommended?

At the present time Germany approaches nearest to an ideal standard of provision for the insane, and this may be expressed in the following formula:

Small hospitals for the acutely insane in cities and colonies for the chronic or mixed classes of insane in the adjacent country. The hospital for the acute insane should be located as general hospitals are, in the most populous portion of the city, to afford convenient access from every quarter. It should have an outdoor department or dispensary, where mental cases may be seen in the very earliest stages. It should have its staff of internes and its attending or consulting physicians and surgeons, a well equipped laboratory and auditorium for teaching, and opportunities should be given for the professors in medical schools in the city to utilize the hospital material for the instruction of students and physicians in the still neglected specialty of psychiatry. Patients should be received for diagnosis as emergency cases without commitment papers, legal forms to be made use of only after a specified time has elapsed and when it becomes evident that long detention will be necessary. Such psychopathic hospitals are now organized in every university town in Germany.

The colony should be situated in the country, where out of door employment, so useful as a remedial measure for long-continued cases of insanity, can be provided. To the colony the reception hospital of the city may transfer the proper cases, convalescents, cases of slow progress, chronic cases, and incurables. The colony should be within easy access of the city, and on one or more lines of railway or waterway. It should be near enough for speedy and inexpensive transfer of patients, and near enough for the visits of friends. Economical reasons demand a situation to which coal and other expensive supplies can

Psychopathic
hospitals
in cities

Colonies in
the country

be brought at the least cost. Institutions have too often been located in out of the way and inaccessible places. It would be difficult to estimate the exact annual cost to the people of some of the sites chosen, in the way of passenger tariff and price of delivery of supplies. In some the saving that might have been effected by a better location would, it is safe to say, go far toward building a new institution every ten or fifteen years.

A cardinal fact that must never be forgotten in establishing an institution for the insane is that no matter where it may be situated, it will inevitably attract to it both acute and chronic cases. To the psychopathic reception hospital of the city, designed though it be for the special benefit of acute cases, will gravitate all the chronic insane that are free in the community. Not only will the colony in the country receive the overflow of the acute hospital of the town, but a large district whose radius will be measured only by railway facilities will send to the colony all kinds of insane patients, whether acute or chronic. This fact has been proved so often by experience that there can be no argument advanced against it. All asylums or hospitals for the insane become mixed asylums, and attempts to separate curable and incurable or acute and chronic cases are merely wasted efforts. The reception hospital of the city will naturally transfer at once such chronic cases as are received by it. But the colony in the country must provide for the acutely insane who will surely be brought thither for care and treatment. In establishing a colony, therefore, after the selection of a proper site convenient to a railway or waterway, with abundance of land for agricultural and other industrial purposes, and with good water supply and sewage facilities, the first buildings to be constructed should be the administration building and a small hospital for the acutely insane. After these an infirmary should be built for all the infirm, sick, decrepit, idle and disturbed patients that are likely to accumulate in an institution intended for, say, 2,000 patients.

All hospitals for the insane inevitably receive both acute and chronic cases

A nucleus having been formed by the construction of

these first necessary buildings, the various cottages which go to make up the true colony or farming hamlet may be added as required to complete the prearranged plan. It would be well that the whole of the land to be used for buildings should be properly laid out by a landscape architect, so that all the buildings to be erected shall have their sites determined in order to insure not only artistic harmony, but economy in the arrangement of roads, walks, water and sewer mains, and of the lines from the central lighting and heating plants. These cottages, which give the colony its village character and in which the workers reside, should be so disposed as to cluster about the various centers of industry—the farms and gardens, brickyard, quarry and shop. Skilful physicians and trained nurses and all the modern paraphernalia of medical practice will be needed in the acute hospital, and trained attendants and medical supervision to some extent in the infirmary. Two attendants, preferably a married couple, should suffice for the selected working class in each of the cottages, the woman to do the very simple cooking required, the man to be the supervisor and director of labor. The medical care here needed will be small. The larger part of the simple fare required will be prepared at the one central kitchen and bakery connected with the infirmary. The acute hospital should have a nurses' kitchen. Each cottage will have a kitchen range for minor cookery. The food ration should differ for every class. By such systematization and classification of patients, the cost of maintenance should be greatly reduced, especially in the items of food, medical officers and employees. The acute hospital and infirmary will be best made of fire-proof or slow-burning construction. The cottages can be built as cheaply as desired. A pavilion for tuberculosis patients should be provided for occupation in winter only, tents being preferable in summer. This pavilion should be constructed of wood and ought to be destroyed in fifteen years, or it might be made a permanent structure of more durable material capable of thorough disinfection throughout the summer when unoccupied.

Grouping of
cottages on
a village
scheme

Tuberculosis
pavilion

The colony system has been carried out in Germany and is much favored there. The arguments in favor of this system of care as opposed to the block system may be summarized briefly as follows: The original cost of the simple villa structures is less than that of the great blocks of buildings with their waste of space in corridors, their expensive underground tunnels, and their elaborate plumbing, heating and ventilating devices; furthermore, the annual cost for repairs is less.

**Economy of
the colony
scheme**

The capacity of the colony may be readily increased at any time and to any extent without detriment to the original plan. It may begin with a simple cottage for twenty or thirty patients, and be enlarged year by year in accordance with the needs of a community.

The cost of maintenance is certainly no greater in the one than in the other plan. The director of Alt Scherbitz, the most complete colony for the insane at present in existence, points out that the per capita cost of maintenance there is less than the average of other German asylums. An important feature is that sanitary conditions are better among scattered groups of patients than among large masses of human beings assembled together in one building.

The matter of food distribution from a central kitchen is shown by experience to be actually no more difficult or expensive by horse and wagon, carts or out-door tram, than by trams laid in costly underground tunnels.

These are the arguments that will appeal to the taxpayer as reasonable and satisfactory.

A far more important line of argument in favor of the colony system is the one founded upon the welfare of patients, and the Commission feels that the taxpayers in general would be as much guided by what seems best for the insane as by the more practical questions of economy. They do not wish to see extravagance in structure or maintenance, but neither do they desire to stint money where wise expenditure will conduce to better treatment and more humane care of the unfortunates they support.

Large hos-
pitals un-
homelike
and unat-
tractive

The home idea is at the basis of the colony system of treatment. The huge general hospital of the cities for patients with sick *bodies* is the natural and legitimate result of the social conditions and the limitations of urban life. But the patient with the sick *mind* cannot, without diminishing his chances of recovery, be transferred from his home to the startling environment of most of our large asylum wards. One can imagine the effect upon the patient's already disordered imagination of finding himself locked into a corridor with barred windows and with from thirty to fifty noisy, violent, filthy and destructive patients about him, for in most of the large asylums thorough classification and segregation are impossible. The colony system permits of the most careful and complete classification in widely separate buildings of the acute, the sick and infirm, the homicidal and the suicidal, the noisy, the epileptic insane, the filthy and destructive, and the quiet chronic workers, instead of mingling them indiscriminately as is commonly necessary in the block system.

Greater
intimacy
between
nurses
and patients

The individual must be more or less lost sight of in the congregate system, where a thousand patients often live together and may even eat together in one huge dining-room. It has been well said that "the conditions in a large asylum are too abnormal, and the departure from all the conditions of ordinary domestic life are too abrupt and too vast to be conducive to real comfort and happiness." The attendants in the block system have their attention too much divided to be able to interest themselves in particular individuals, whereas in the smaller houses of the colony a greater intimacy and a more personal interest develop, and there arises as a result of such a system a generous rivalry between the various houses that is stimulating both to the attendants and to the patients.

We must not shut our eyes to the fact that all authorities agree that we accomplish more by moral agencies in the treatment of the insane than by the use of drugs. By moral agencies we mean appeals to the mind. Since it is chiefly through the mind that we must operate to restore balance to the faculties,

surely it is of the highest importance to place the patient with mental disorder in the most suitable environment, one where there is the greatest individualization, and the greatest stimulus to the disordered intelligence, an environment that is pleasant and homelike, and in which the associations shall be orderly, friendly, and familiar. In fact the patient's surroundings should be made as nearly normal as possible. An essentially abnormal environment can not but be detrimental to an abnormal mind. Those who are interested in the colony system of care should make themselves familiar with the scheme of the Craig Colony for Epileptics in New York, which could serve as readily for the insane as for epileptics. They should also read the report on Continental colonies for the insane just published by the Lancashire (England) asylums board which is contemplating the erection of a sixth asylum in Lancashire on the colony plan.

Craig colony
an ex-
emplar of
colony life

The State should therefore construct reception hospitals for the acutely insane in the cities and colonies for the mixed classes of insane in the country. No state government should at this time undertake a system of care of the insane without careful consideration of this twentieth century method.

In the older states where the methods of care of the insane have already been long established, modifications to follow along this line can only occasionally be undertaken. In new states this system should be organized from the first; but even in such a state as New York where much progress has been made in the system of caring for the insane, we find that many changes are not only desirable but may readily be made. The large cities like New York and Brooklyn have an imperative need for reception hospitals for the insane. There should be one on Manhattan Island to accommodate 100 to 200 patients, and one in the center of Brooklyn to accommodate 50 to 100 patients. It will surprise many to learn that acute cases of insanity in many cities and towns in this State are still taken to jails and station houses until such time as they can be removed to a hospital. At Albany a reception hospital for the insane

Psychopa-
thic hospi-
tals for large
cities in New
York State
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has been constructed by the county as a pavilion of the general hospital, and this is an excellent plan to follow in cities of the size of Albany. It seems an absurd arrangement, but the nearest hospital to which the acutely insane of so large a city as Syracuse can at present be taken is situated at Ogdensburg, a weary journey of many hours, and it is stated that for the immediate reception of urgent cases in Syracuse the station house must be employed. Even in Buffalo, which has a large State hospital in the city limits, emergency cases are taken to the station houses until commitment papers can be prepared. Buffalo has a population large enough to support a hospital for nervous diseases, and in the event of such a hospital being established in the populous center of the city, a pavilion for the reception of the acutely insane might be constructed in connection with it. In three other cities—Utica, Binghamton and Rochester—there are State hospitals within the city limits, but no proper modern provision in any of them for the reception and treatment of the acutely insane. This state of affairs is shortly to be remedied at Rochester by the construction of a pavilion for acute cases, with every facility for treatment.

The Commission hopes that at some future time arrangement may be made for our State hospitals and licensed private asylums to receive urgent cases for 48 to 72 hours upon an emergency certificate to be signed by the family physician while the regular lunacy certificates are being prepared. This would do away at least with the present use of jails and station houses as places of reception for persons ill of brain disease.

Before many years have elapsed the State of New York will require two or three new institutions for the insane. The north-eastern portion of the State is entirely unprovided with an asylum, and very long journeys must be taken by the insane and their visiting friends to reach one of the present State hospitals as Ogdensburg, Utica, or Poughkeepsie. A colony for the insane should be located somewhere in the Champlain region. In a few years the State hospital at Flatbush must be given up to the county, and a new colony should be organized elsewhere



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FOR GENERAL POPULATION AND INSANE POPULATION OF EACH STATE
HOSPITAL DISTRICT, AS WELL AS CAPACITY AND NUMBER OF PATIENTS
IN EACH HOSPITAL, SEE TABLE BELOW.

OCTOBER 1, 1901.



	State Hospital	General Population	Insane Population of District	Capacity of Inst.	Number of Patients in Hospital
1	Utica	417,910	1,193	1,091	1,148
2	Willard	451,620	1,322	1,905	2,236
3	Hudson River	753,434	2,518	1,884	2,094
4	Middletown	262,885	823	1,104	1,237
5	Buffalo	508,647	1,433	1,631	1,913
6	Binghamton	378,067	1,031	1,300	1,350
7	St. Lawrence	551,864	1,304	1,652	1,671
8	Rochester	254,913	742	500	581
9	Long Island	1,452,611	3,736	3,305	3,975
10	Gowanda	184,370	377	260	351
11	Manhattan	2,050,000	7,162	4,066	6,098
	Totals	7,266,021	21,641	18,638	22,654

to receive the insane from this asylum. The State has a lease of Ward's Island for some 11 years to come, but at the end of that time this island is expected to revert to the city of New York. It may be decided that it is best to remove the four thousand insane on this island to quarters outside of the city limits. Should this be done there is an opportunity for the organization of two or possibly three institutions for the insane on the colony plan.

The twentieth century system of caring for the insane by psychopathic hospitals in the cities and colonies in the country would be incomplete if especial stress were not laid on the scientific features of this system. The twentieth century finds us on the verge of a remarkable development of clinical and laboratory methods of research in the domain of morbid psychology, and the new system demands that each institution, whether reception hospital in the city or colony in the country, shall be provided with all the facilities for scientific investigation, and it is not too much to expect that present research may bear such a plentiful harvest during the new century that its discoveries will startle the world, and in any event the unfortunate sufferers from insanity will gain immeasurably by better methods of care, treatment and cure to be ascertained in coming years.

New institutions should represent advanced features of treatment

From the chain and dungeon to the psychopathic hospital and colony is a measure of the progress of the nineteenth century in the care of the insane. May we not employ that gauge as a measure of the possibilities of the twentieth century in the same direction?

WHAT THE STATE HAS ACCOMPLISHED IN RECENT YEARS FOR THE WELFARE OF THE INSANE

The Commission would be remiss in its duty if it failed to fully inform the Legislature, the friends of patients in the State hospitals and the taxpayers in the State of the efforts systematically and strenuously made year after year not only to bring about an enhanced recovery rate but to add to the physical

wellbeing of such patients as suffer from bodily ailments tending to affect even remotely their mental restoration.

Probably very few persons outside of circles brought into immediate relation to the State hospitals know of the great number of improvements which have of late years been made in the methods of care of the insane.

1. A dentist is regularly employed at each of the hospitals to care for the patients' teeth and a dental office and apparatus have been provided for this purpose.

2. An oculist is a salaried attending officer at each hospital for the purpose of looking closely after the eyes and ears of the inmates.

These two features undoubtedly afford much relief to patients as regard pain, indigestion and the ills which come from neglected eye and ear disorders.

3. Each hospital is fully equipped with an operating room quite equal to any in the general hospitals of our cities where operations formerly altogether neglected are now almost daily performed. These operations often lead to the cure of insanity, a tumor or other lesion having acted as the physical cause of a mental disorder. It would be impossible to give even a brief summary of the notable operations which have been carried out in our State hospitals within the brief space available, but they would quite equal in number and success the results at many of the general hospitals of our cities.

4. A woman physician in every hospital ministers to the special needs of women in the way of operative and other treatment.

5. Some of the State hospitals for the insane situated in the cities have availed themselves of the services of distinguished specialists practising in the community as consultants who have given their valuable time free of charge to the poor unfortunates confined in the asylums. In this way large numbers of patients have had, in addition to the care of the medical officers of the institution, the aid of expert surgeons, general practitioners, gynecologists and neurologists.

6. The training schools for nurses referred to elsewhere are

now a part of the organization of every one of the State hospitals, so that all of the sick, the infirm and the operative cases have the same skilled care that they would obtain in general hospitals, while the entire standard of nursing the insane has been enormously improved and elevated by this means.

7. Patients were brought formerly by their friends, or more often by deputy sheriffs or other county officers, to the hospitals, frequently bound and tied and often in bad condition from unskilful management. Now nurses and if necessary a doctor are sent to the counties for the patients.

8. Restraint by means of straps, camisoles, straitjackets, cribs, etc., the so-called "mechanical restraint," has been practically abandoned throughout the State for some years. In this connection we might mention that in the Wisconsin system of county care such restraint is still used.

Abandonment of mechanical restraint

9. The open-door system (by which is meant unlocked doors for certain of the convalescent wards) has been in vogue in this State for many years.

10. Women nurses have been introduced on a considerable proportion of men's wards in the hospitals of this State. They are usually married women, the husbands taking part in the work as male nurses. This has tended to introduce a more homelike condition in the wards, and has been distinctly beneficial in improving the character of the nursing of the sick and infirm.

11. The proportion of able-bodied patients employed in the wards, shops, garden, grounds, barns and on the farm has been constantly increased from year to year, so that the actual labor performed by the patients has a distinct monetary value, difficult to compute, but undoubtedly of real importance in diminishing the cost of maintenance to the low figure now reached.

12. The so-called "moral treatment" of the insane, by which is really implied "mental treatment," and through which the disordered mind is vastly helped towards the goal of recovery, has been constantly improved and extended. The wards and rooms have been made homelike and attractive. Flowers, birds,

Development of moral treatment of the insane

libraries, games, musical instruments have been provided. Theatrical entertainments, schools, lectures, concerts, baseball fields, tennis courts, and everything of this nature that could help to "minister to a mind diseased, pluck from the memory a rooted sorrow," has been provided.

13. Religious services are regularly given, and chaplains and priests supplied by the State for the spiritual needs of the patients.

We have enumerated above a few of the features which have been developed in the methods of care and treatment of the insane in this State during the past few years. A large number of improvements might be cited if it were expedient to go into still greater detail. We might for instance describe the installation of all sorts of hydro-therapeutic apparatus in every hospital for the administration of curative baths and douches, the complete equipment of the several institutions with electro-therapeutic apparatus and appliances for invalids, the construction of solariums, etc. But enough has been stated to emphasize the distinction between the present State care and the old county system where none of the above-described aids to care and treatment were in vogue. When it is remembered that \$155 per year is the actual present expenditures to the State for each patient, and that this includes not only food, fuel, lighting and housing, but all the above-noted ameliorations in care and treatment, we feel that the State may justly be proud of its success, its economy and its progress in the promotion of the welfare of its insane charges.

A NOTE AS TO THE CAUSES OF INSANITY.

Since there is a great deal of misunderstanding among some people as to the causes underlying the development of insanity, we feel called upon to make a brief statement in this connection, particularly as it has come to our ears that the belief prevails in some quarters that insanity is largely due to vicious habits and indulgences, and that the insane are, on that account, not entitled to the great consideration given them. The fact is

that nothing could be further from the truth, and an erroneous idea of this kind is not only unjust to the unfortunates in our asylums and to their relatives, but might easily lead to a careless consideration of their wants and needs in the way of care, treatment and cure.

The chief factors in the causation of insanity may be summed up in two words—heredity and strain. Heredity is responsible for a weak and unstable nervous system which can not readily resist the stresses to which it becomes subject during a lifetime. The strains or stresses which break this feeble nervous system may be physical or mental. Among physical causes may be mentioned diseases of all kinds, like consumption, typhoid fever, kidney diseases, anaemia, etc.; accidents which injure the body, blows upon the head, childbirth, etc. Among the mental stresses we include grief over family bereavements, domestic troubles, loss of property, fright, religious excitement, and the like.

**Heredity
and strain
chief causes
of insanity**

The physical causes act to produce insanity about twice as frequently as the mental causes. There are more men made insane by physical causes than women, while the contrary is the case with regard to the mental stresses.

The ratio of what might be called vicious causes of insanity is very small as compared to the kind of causes mentioned above. We suppose that one who referred to vice as a cause of insanity would mean to include under that heading overindulgence in alcohol and narcotic drugs, and sexual abuses and diseases of one kind or another. A careful study of the facts proves that this category of causes is responsible for insanity in less than one-fifth of the cases, and even in this small proportion we must not lose sight of the strong associate factor of heredity which has made a frail, nervous system and a weak character, thus predisposing many of this particular category of the insane to the very indulgences which have finally proved their complete ruin.

DIETARIES FOR HOSPITALS FOR THE INSANE

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DIETARIES FOR HOSPITALS FOR THE INSANE

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INTRODUCTION

The 10th, 11th and 12th Annual Reports of the New York State Commission in Lunacy for the fiscal years 1897-8, 1898-9 and 1899-1900, respectively, contained accounts of the progress of an inquiry made under my direction for the purposes of determining a dietary standard for the hospitals for the insane, and of learning ways by which the cost of the food might be reduced if practicable while the diet should be improved. These accounts were in the form of Reports on Dietaries for Hospitals for the Insane.

The first Report on Dietaries was published in the 10th Annual Report of the Commission, and gave a general discussion of food and its functions, the factors for determining a physiological standard, and the paucity of data relating to the actual food requirements of the insane. The actual amounts of nutrients in the food supplied as estimated from the stewards' accounts were compared with the results of dietary studies of persons in health and a tentative dietary standard was proposed. The second Report on Dietaries was published in the 11th Annual Report of the Commission and contained the results of 40 dietary studies made among different classes of the hospital population, from which a number of general deductions were drawn. The main object of these studies was to throw light upon the food requirements of the different classes of the insane, compare these requirements with the actual food supply, and thus lay the foundation for the desired dietary standard and improvements. The third report was presented in the 12th Annual Report of the Commission. It was very brief and gave simply an outline and summary of the results

which had been obtained up to that time. The present report includes a general review of what has been done in these investigations, a description of the work carried on during the fiscal year 1900-1901, and general conclusions regarding the dietary standards for hospitals, ration allowance, the methods for diminishing waste and reducing cost, the preparation of attractive dishes, and other subjects.

OBJECT, METHODS AND MAIN RESULTS OF THE INQUIRY*

The primary object of the inquiry into the hospital dietaries has been to establish a "dietary standard" or "standard ration" for use in the New York State Hospitals for the Insane. Such standard must be based upon the actual physiological needs of the hospital population as a whole, with proper margin for shrinkage and waste. In working toward such standard, information was sought regarding such subjects as the kinds, amounts and actual nutritive values of the food materials supplied to

* It is desirable to know whether the chronic insane, including the demented, who have very little physical or other activity and eat comparatively little food, are able to digest and utilize the food they eat as well as ordinary people in health. This can be found out only by digestion experiments. Such experiments have been made in large numbers with people under ordinary conditions. The method consists in weighing and analyzing the food eaten and the intestinal excreta. The latter include the undigested residues of the food and with them unused residues of the digestive juices and other materials; taken together they represent the portions of food which the body does not utilize for the ordinary purposes of building and repair or for the yielding of energy. Subtracting the ingredients of the feces from those of the food, gives a measure of the amounts of food constituents actually digested and made available to the body for building material and fuel. The results of experiments of this sort with people in health have been used in the preparation of table which shows the proportions of available nutrients in ordinary food materials.

In order to get light upon the digestibility and availability of food materials when eaten by the chronic insane, a series of experiments were undertaken by Dr. E. G. Aldrich of the Buffalo State Hospital. The method was that just described. The studies were made with fifteen patients of the chronic class. They were isolated, one or two at a time, each during a period of three days and kept under constant watch. The food and feces were weighed and samples were taken for analysis. The analyses were carried out under my direction in the chemical laboratory of Wesleyan University. The results, on the whole, showed a slightly lower degree of availability of the nutrients of the food materials than is ordinarily found with people in health. That is to say, the food was not digested as completely, and the utilized residues were larger than is usually the case when the same kinds of food material are eaten by people in ordinary health, though the differences, in this respect, between the patients experimented with and normal persons were not large. This implies a somewhat inferior digestive capacity on the part of the patients with whom the experiments were made. In how far this smaller power for digestion is characteristic of this class of the insane can be told only by more extensive experiments. The subject, however, is one well worthy of further experimental study.

The results of Dr. Aldrich's experiments are not ready for printing in the present report, but it is expected that they will appear later in an appropriate publication.

the hospitals; the amounts of food actually eaten by different classes of the hospital population; the losses of food by shrinkage and waste in the storeroom, the kitchen and the dining room; improved methods of cooking and serving the food by which variety and economy might be introduced in the diet; ways by which more or less of the food material now rejected in the kitchen and dining room, or at best used as food for swine, may be saved and utilized for the nourishment of the hospital population; and finally ways in which the more expensive foods may at times be replaced by those which cost less but are equally nutritious and wholesome.

In carrying out the inquiry two considerations have been paramount—the welfare of the people of the hospitals and the interests of the taxpayers at whose expense they are supported.

The plan has been to study the statistics of food supply to the hospitals; to find by weighings and measurements how much food is actually eaten by the different classes of the population; to examine into the methods of selection, handling, cooking and serving the food; to make chemical analyses when necessary in order to learn the composition and nutritive values of the food materials; to employ skilled experts to examine into the best methods of cooking and of kitchen and dining room management; to plan experiments upon the proper feeding of patients of different classes; and finally, to learn how the proper officers and employees, and especially the chefs and cooks, may be best enabled and encouraged not only to carry out but also to devise methods for improvement.

The conclusion as to a dietary standard is given beyond, in the form of an estimate of the physiological need of the hospital population, per person per day, for nourishment. This is supplemented by statements regarding the necessary margin which must be added to the physiological standard, as allowance for shrinkage and waste, in order to obtain a hospital standard or “ration allowance.” The distinction between the physiological and the hospital standard is thus an important one.

Among other conclusions are the following: The amount of

food supplied to the hospitals is greatly in excess of the actual need of the population for nourishment, and of the amount actually eaten. The difference between the food purchased, i. e. supplied, and that eaten represents what are technically termed "shrinkage," i. e., loss in the storeroom, and "waste," i. e., the food material left uneaten in the kitchen and dining room.

The figures thus far obtained imply that shrinkage and waste, when the studies begun, amounted to at least one-fourth, and apparently to nearer one-third, the total amount of the food supplied. That is to say, the people apparently ate but little over two-thirds of the nutritive material of the food purchased. A certain loss of food is neither unnatural, unusual nor easy to avoid. A good deal of it is inevitable. Nevertheless it will, in my judgment, be possible to provide for the better utilization of the food, so that the loss may be materially reduced. This can be accomplished by a better understanding of the nutritive value of the food and of the demands of the people for nourishment, and by improved methods of storing, handling and especially of cooking and serving food. Indeed steps in this direction have been taken and are bringing results gratifying in themselves and promising for the future. I am inclined to think the best opportunities for improvement are in the hospital kitchens. It will thus be possible to provide more palatable and more attractive nourishment for the hospital population and at lower cost.

As an illustration of one of the ways in which improvement is possible, I may cite the actual experience in one of the New York hospitals. Dr. A. W. Hurd, of the Buffalo State Hospital for the Insane, has favored me with an account of some things which he has observed in his own institution as an outcome of the dietary investigations.

At the outset attention was called to the amount of waste, and also to the possibilities of improvement in some of the details of the cooking and serving of food. The attention of officers and employees was directed to this subject. The books

of the hospital show a very material reduction in the per capita cost of the food. This saving, as based upon the per capita cost of the first year, is estimated by Dr. Hurd as 13.7 per cent. What makes this reduction the more striking is the fact that it has been effected notwithstanding a material advance in the price of a considerable number of the food materials. At the same time there has been an improvement in the diet as a whole. One feature has been the addition of so-called "extras" to the diet of the attendants. I have before me a copy of the dietary schedule of the hospital for the week ending April 21, 1901. The dishes are given for breakfast, dinner and supper of each day. Those for the inmates are such as may be ordinarily found in a well-managed institution; but, besides these, there are the "attendants' extras" for nearly every meal. They include such things as fried ham, cold meat, muffins, beef hash, coffee cake, potatoes, fried eggs, toast, fruit sauce, buns and the like. This does more than please the employees. It is a shrewd way of securing better service without increase of salary.

Dr. Hurd says:

"While we cannot say that all this is due entirely to the food investigations, and while some of it is due to care and vigilance in buying, yet we think a great deal of it is attributable to the extra care and attention which have been paid to the cooking, distributing, service and prevention of waste which are the outcome of the investigations."

He adds:

"The cooperation in this work has not been a burden or drag on the institution, but has, we think, resulted in a direct benefit to the dietary of the inmates, the satisfaction and contentment of all concerned, and has been a marked source of economy."

A large part of this saving in cost, while the diet has been improved, Dr. Hurd attributes to the reduced waste of food. In this connection he has a rather amusing story. As the care in this respect gradually began to make itself effective, complaints began to come from the man in charge of the piggery that the feed was getting short. The result was that cornmeal was bought and the number of swine reduced. The economy that was so fruitful in the hospital was inconvenient in the piggery,

but it was a good deal cheaper to buy pork or fatten pigs on cornmeal than to use bread and meat for the purpose.

By citing this instance I do not mean to imply that like results may be achieved immediately in all institutions. Doubtless the improvement from which the most lasting benefits will accrue must be gradual. To make it most successful will require careful and long continued experiment and observation. The methods of experiment and practical application of the results can be gradually developed in the hospitals themselves, so that their own officers and employees will be able to accomplish the desired object in the most economical, useful and satisfactory ways.

One thing now much needed as a practical step in this direction is a series of experiments with representatives of different classes of the hospital population; men and women, of different degrees of activity from workers to terminal demented. The normal physiological demands of these classes are widely different. Just what they are can be learned only by actual test with different diets. Such tests, though requiring considerable labor, are perfectly feasible and will far more than repay the cost. Until they are made it will be impossible to set up an exact physiological standard for the population of a hospital for the insane.

There are several reasons for anticipating success in the effort toward dietary improvement. One is the hearty interest shown by the hospital officers. Another is the fact that a great deal of attention has been given to the study of dietetics and food economy during the past few decades. A large part of this inquiry has been carried on in Europe, but of late it has been introduced quite actively in the United States. An especially favorable circumstance is the provision by the United States Government of an appropriation for special inquiry in this direction, which is being carried out under the auspices of the United States Department of Agriculture and in cooperation with scientific, educational and philanthropic institutions in the United States from Maine to California and from Minne-

sota to Alabama. The larger investigations have made a foundation for these inquiries and have made it possible to prosecute the present inquiry with far greater success and less expense than would otherwise have been possible.

FOOD AND ITS FUNCTIONS*

Food is that which, when taken into the body, builds up its tissues and keeps them in repair, or which is consumed in the body to yield force and heat. It is used to form the tissues and fluids of the body, such as muscle, blood, bone, and brain, and to repair their waste. If the food is in excess of the daily requirements, it may be stored in the body. The material thus stored is principally fat. When food or body tissue is consumed in the system, the energy which was latent therein becomes active and manifests itself in the force or heat required for the various bodily uses.

The most healthful food is that which is best fitted to the needs of the user. The cheapest food is that which furnishes the largest amount of nutriment at the least cost. The best food is that which is both most healthful and cheapest.

We have, then, to consider the kinds and amounts of nutrients in different food materials, their digestibility, the kinds and amounts needed for nourishment by persons under different conditions of rest and work, and the nutritive value of different food products as compared with their cost.

Ordinary food materials, such as meat, fish, eggs, potatoes, wheat, etc., consist of:

* The first report on *Dietaries for Hospitals* (10th annual report of the Commission) contained a chapter on this subject. The principal statements there made are repeated here, though in somewhat different form. One reason for the repetition is that the statements represent results of late experimental inquiry which have become current only in the latest books of reference, and hence are not easily available to all readers. Another and more important reason is that some of the more important statistics are expressed in a new form; that is to say, the figures for proportions of nutrients in a number of the statistical tables, and in the dietary standards, which are of fundamental importance, show the quantities that are digestible or "available" for use in the body, rather than the total quantities. Of course the available nutrients are a more accurate measure of nutritive values than the total nutrients, as is explained beyond. It is only within a short time that there has been much experimental inquiry of such nature as to make this form of estimate of nutritive values possible, but there is every reason to believe that the figures for available nutrients will come into general use. To make the present report most valuable for future reference, therefore, the explanations seem called for.

Refuse.—As the bones of meat and fish, shells of shellfish, skins of potatoes, bran of wheat, etc.

Edible portion.—As the flesh of meat and fish, the white and yolk of eggs, wheat flour, etc. The edible portion consists of water and nutritive ingredients, or nutrients. The most important nutritive ingredients are protein, fats, carbohydrates, and mineral matters.

The water, refuse, and salt of salted meat and fish are called non-nutrients. In comparing the values of different food materials for nourishment they are left out of account.

THE NUTRIENTS IN FOOD

The chief uses of food, then, are two: (1) To form the material of the body and repair its wastes; (2) to yield heat to keep the body warm and muscular and other power for the work it has to do. In forming the tissues and the fluids of the body the food serves for building and repair. In yielding heat and power it serves as fuel.

The different nutrients of food serve the body in different ways. The principal tissue formers are the protein compounds, especially the albuminoids. These make the flesh of the body. They build up and repair the nitrogenous materials, as the muscles and tendons, and supply the albuminoids of the blood, milk, and other fluids. The chief fuel ingredients of the food are the carbohydrates and fats. These are either consumed in the body when the food is eaten or they are stored as fat to be used as occasion demands.

Protein—nitrogenous nutrients.—The term protein is commonly applied to all the nitrogenous nutrients in the food with the exception of the nitrogenous fats. It includes a number of widely different groups of compounds with correspondingly different nutritive values. The most important group includes such compounds as albumen of meat and eggs, casein of milk, myosin of meat, gluten of wheat, etc., all of which are sometimes grouped together as “albuminoids” or “proteids.” Closely allied to these, though of hardly equal value for build-

ing tissue, are the so-called gelatinoids, such as collagen, chondrigen, ossein, etc., which occur in tendon, bone and other connective tissues. They are readily transformed into gelatin and hence are sometimes called "gelatinoids," though they are designated by some writers as proteids and by others as albuminoids. The two classes which we have thus designated as albuminoids and gelatinoids are here grouped together as proteids. Distinguished from these are the non-proteids, including the creatin, creatinin and other so-called extractives of meat, and the amids, etc., of vegetable foods.

Not a little confusion arises from the difference of usage of writers regarding the names of these compounds. The terminology here employed is that adopted by the Association of American Agricultural Colleges and Experiment Stations.*

According to the best present evidence, only the proteids, and especially those here called albuminoids, as distinguished from the so-called gelatinoids, are capable of being transformed into nitrogenous body tissue, and thus go to form the blood, muscle, tendon, brain, nerves, etc. The chief use of the non-proteids appear to be for fuel, though some of them are believed to have a useful stimulating action, as in the case of the so-called extractives contained in meat extract, beef tea, and the like.

Protein is found in greater or less amounts in nearly all food materials, except the pure fats, sugars, and starches. The chief sources are meats, fish, eggs, and milk among the animal, and the legumes and cereals (beans and peas, wheat, corn, etc.) among the vegetable food materials. The garden vegetables and fruits furnish a very small amount of protein, and even this has a low nutritive value on account of its large proportion of non-proteids. The protein of such animal foods as meats, fish, eggs, and milk, and of such vegetable foods as the cereal grains and seeds of legumes consists mainly of albuminoids, that is of the most valuable protein compounds.

Fats and carbohydrates—fuel ingredients.—The fats and carbohydrates in the food may be considered together in view of

* See U. S. Dept. Agr. Office of Experiment Stations, Bul. 65, p. 18.

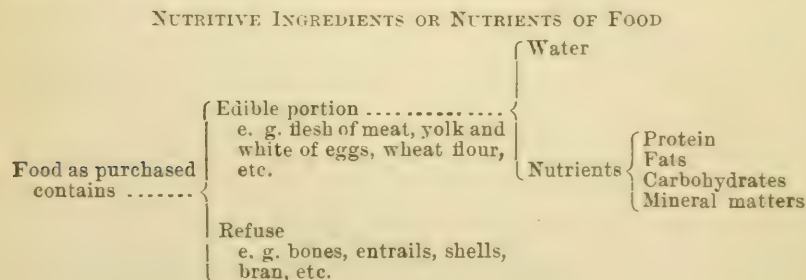
their similarity of use in the body. Their function is mainly that of fuel to yield energy for warmth and muscular work. Unlike the proteids they cannot form nitrogenous tissue, though they are contained and stored in the fluids and tissues of the body. Thus large amounts of fat are stored in adipose or fatty tissue where it forms a reserve supply of fuel for future use. Both the fats and the carbohydrates, by being themselves consumed, spare the more essential and costly nitrogenous matter of food and body tissue from consumption.

The chief source of the fats of the diet is found among animal foods, such as meat, eggs, butter and milk. The amount of fats in vegetable foods is, as a rule, very small, except in such foods as olives, cocoa, etc., which contain considerable fat as oil. The carbohydrates—sugars and starches, cellulose, etc.—are obtained almost entirely from the vegetable foods.

Mineral matter.—The mineral matter, or ash, which is left behind when animal or vegetable matter is burned, consists of a variety of compounds including chiefly the phosphates, sulphates, and chlorides of calcium, magnesium, potassium, and sodium, with minute quantities of iron and other elements. Calcium phosphate, or phosphate of lime, is the chief mineral constituent of bone.

Mineral matters are found to a greater or less extent in all the tissues and fluids of the body. They are also found in nearly all food materials.

The different ingredients occurring in food as it is ordinarily purchased and the uses of the various nutrients may be summarized as follows:



USES OF NUTRIENTS IN THE BODY

Protein	Forms tissue	} All serve as fuel to yield energy in the forms of heat and muscular power
e. g. white (albumen) of eggs, curd (casein) of milk, lean meat, gluten of wheat, etc.		
Fats.....	Are stored as fat	
e. g. fat of meat, butter, olive oil, oils of corn and wheat, etc.		
Carbohydrates.....	Are transformed into fat	}
e. g. sugar, starch, etc.		
Mineral matters (ash)	Share in forming bone, assist in digestion, etc.	
e. g. phosphate of lime, potash, soda, etc.		

THE DIGESTIBILITY OR "AVAILABILITY" OF FOOD MATERIALS

The value of food for nutriment depends not only upon the total amounts of nutrients it contains but also upon the amounts which the body can make available for its support. The proportions of the different nutrients which the body can digest and utilize from different food materials are learned by digestion experiments. Such experiments involve the accurate measurement of the amounts of the different kinds of nutrients consumed in the food during a given period and the corresponding amounts excreted in the feces. This last material is made up of the undigested residue of the food and of the so-called metabolic products. The latter consists mainly of residues of the digestive juices. Late research has shown that in man the actual amount of undigested nutrients makes up relatively a much smaller portion of the intestinal excretion than was formerly supposed. Indeed some investigators are inclined to take the ground that the nutrients in the more digestible food materials are almost wholly digested by persons in health, and that the solid excreta are almost entirely made up of the so-called metabolic products and residues from the alimentary canal.

While the feces do not give an exact measure of either the actual amount of the different nutrients which remain undigested in their passage through the alimentary canal, or of the amounts of digested juices used for the digestion, they do give us a measure of the availability of the food for use in the body, that is, as building material and fuel.

Considerable experimenting has been done upon the subject of the availability of different food materials. While it is found that different people vary in the amounts which they can utilize from the same food, the differences are not so great as might be supposed. Using the word digestible in the sense of available, as just explained, the protein of vegetable foods is rather less completely digestible than that of animal foods. Thus, in potatoes and whole wheat and rye flour it may sometimes happen that as much as one-fourth of the protein escapes utilization in the body and may, therefore, be recovered as undigested or unavailable. From one-tenth to one-sixth of the protein of wheat flour, corn meal, beans and peas may in like manner be assumed to be unavailable. These estimates assume that the materials are cooked and eaten in the usual way. Under the same circumstances, from nine-tenths to the whole of the protein of milk, meats, and fish is assumed to be available or digestible. The digestibility or availability of the fats is likewise variable. Sometimes a very considerable part of the fat of the food fails to be absorbed in its passage through the alimentary canal. In general it may be assumed that about 5 per cent of the fat of milk, meat, eggs, butter and lard, and a considerably larger proportion of the fats of some vegetable foods will be unavailable. When, however, the diet contains a very large amount of fat—for instance, when it consists largely of fat meat—the digestive processes are interfered with and are less complete.

The carbohydrates, which make up a large part of the vegetable foods, are in general very available. Cane sugar is believed to be almost completely digestible, and this is also assumed to be the case with the sugar of milk.

The proportions of the different nutrients of a food material or diet which are actually available for use in the body are called percentages or coefficients of availability. From the results of a large amount of experimenting it is possible to determine with some approach to accuracy the coefficients of digesti-

bility or availability of the nutrients of different kinds or groups of food materials. They are as follows:*

TABLE A

Coefficients of availability of nutrients of different groups of food materials as used in ordinary mixed diet and of total nutrients of mixed diet

	Protein	Fats	Carbohy- drates
	Per cent	Per cent	Per cent
Animal foods.....	97	95	98
Cereals	85	90	98
Legumes (dried).....	78	90	97
Sugars and starches.....	.....	.....	98
Vegetables.....	83	90	95
Fruits	85	90	90
Vegetable foods	84	90	97
Total food.....	92	95	97

THE FUEL VALUE OF FOOD

Heat and muscular power are forms of force or energy. The energy comes from the food and is developed as the food is oxidized in the body. The unit commonly used in the measurement of this energy is the calorie, the amount of heat which would raise the temperature of 1 kilogram of water 1° C. or approximately one pound of water 4° F. Instead of this unit a unit of mechanical energy might be used—for instance, the foot-ton, which represents the force required to raise one ton one foot. One calorie is equal to very nearly 1.53 foot-tons.

When the food is burned in the body the energy which is potential or latent in the nutrients becomes kinetic or active and appears in the form of heat and muscular work. If the food were burned, i. e., oxidized completely, all the energy would then be made available; but a part escapes oxidation and is given off in the unburned material of the feces and urine. The total energy less that of the unoxidized material is the available energy, that is, the measure of the fuel value of the food.

* See Report Storrs (Conn.) Expt. Sta. 1899, p. 83.

The factors for fuel value which have been in most common use up to the present time have been those proposed by Rubner* in 1885. This investigator assigns 4.1 calories per gram to the protein, 9.3 to the fats, and 4.1 to the carbohydrates of ordinary mixed diet. These factors were used in my earlier reports to the Commission in Lunacy and for convenience of comparison of the results already published with those here given they are used in the present report. In the light of recent investigation, however, it is pretty certain that these factors are rather too high, and new factors have been suggested† based upon a much larger amount of experimental data than was available 15 years ago. Rubner's figures were based upon comparatively few data and these almost exclusively of German origin. Since they were proposed the data have been greatly increased. Indeed the amount since accumulated as the results of American research is several times as large as the total used by Rubner, and has the still further advantage of being obtained by more accurate methods, as is natural in the progress of such inquiry. We are to-day in condition to make estimates of fuel values of different classes of food materials, as well as of the food of ordinary mixed diet as a whole. The final results of such estimates are shown in the following table. The figures show the amounts of energy which one gram of the given nutrient from the given kind of food material can furnish the body for use as heat or muscular work.

* Ztschr. Biol. 21 (1885), p. 377. See also Ztschr. Biol. 42 (1901), p. 261.

† See article on this subject by Atwater and Bryant, *Report Storrs Agr. Expt. Sta.*, 1899, pp. 69-110.

TABLE B

Fuel values per gram of nutrients in different kinds of food materials

	Protein	Fats	Carbo- hydrates
	Calories	Calories	Calories
Meats and fish	4.25	9.00	.....
Eggs	4.35	9.00	.....
Dairy products.....	4.25	8.80	3.80
Animal food (of mixed diet).....	4.25	8.95	3.80
Cereals	3.85	.....	4.10
Legumes (dried).....	3.45	.....	4.05
Sugars .....	.....	.....	3.85
Starches .....	.....	3.35	4.10
Vegetables	3.10	.....	4.00
Fruits	3.35	.....	3.60
Vegetable food (of mixed diet)	3.75	.....	4.00
Total food (of mixed diet)	4.00	8.90	4.00

NUTRITIVE RATIOS

As the chief function of both fats and carbohydrates is to serve as fuel it is of more importance that the total amount of the two be appropriate than that they should be in definite relative proportion to each other. The ratio between the amounts of protein and of the other organic nutrients in the food is called the nutritive ratio. More exactly it is the ratio of the digestible protein to the digestible fats and carbohydrates. In ordinary usage, however, it is frequently made to apply to the ratio of the total protein to the total fats and carbohydrates. Since the fuel value of fat is about two and one-fourth times that of carbohydrates or protein the quantity of fat is multiplied by two and one-fourth and added to the carbohydrates and the nutritive ratio obtained by dividing this sum by the amount of protein. If the fats and carbohydrates are very largely in excess of the protein the nutritive ratio will be large or, as it is technically called, "wide;" becoming "narrower" as the relative amount of protein increases. As a rule the animal foods have the smaller nutritive ratio and the vegetable foods the larger, although to this statement there are many exceptions. A "well

balanced" diet is one with a proper nutritive ratio. Hence, in calculating the amounts of different food materials for a dietary the nutritive ratios are essential considerations. Physiological chemists have devoted a great deal of observation and experimental research to the question of the nutritive ratios most appropriate for the foods of people of various classes in health with different kinds of muscular activity, but as yet little is definitely known as to the relation between mental activity, normal or abnormal, and the demands for nutrients in food.

THE COMPOSITION OF ORDINARY FOOD MATERIALS

Our common food materials differ greatly in the amounts of nutrients they contain. Of the whole weight of an average piece of beefsteak, round, a little less than one-third would be actual nutritive material. In smoked ham the proportion of nutritive ingredients is larger, being nearly one-half the whole weight. In milk the proportion is a little over one-eighth, in potatoes less than one-fourth, while in wheat flour seven-eighths of the whole weight consists of actual nutrients.

Table C shows the percentage of different ingredients, refuse, water and nutrients, in a considerable number of food materials as they are ordinarily found in the markets.

In general, the animal foods have the most of protein and fats, while the vegetable foods are rich in the carbohydrates, starch and sugar. The lean meats and fish abound in protein. Cheese has a large quantity of protein because it consists largely of the casein of milk. Among the vegetable foods, beans and peas have a high proportion of protein, and the proportion in oatmeal is also large, while in wheat it is moderate, and in cornmeal it is rather small. The materials with the highest fuel value are those with the most fat, because the fuel value of the fat is, weight for weight, two and one-fourth times as great as that of either sugar, starch, or protein. Hence fat pork and butter lead the other materials in fuel value. The fat meats in general stand high in this respect. So also do the grains, flour, and meal, as they have large quantities of carbohydrates.

Potatoes are quite low in the list in respect to fuel value as well as protein, principally because they are three-fourths water. For the same reason, milk, which is seven-eighths water, ranks low in respect to both protein and fuel value.

It is important to remember that all these estimates apply to the food materials in the form in which we buy them, including both refuse, like the bones of meat, skins of potatoes, etc., and water. If we were to remove the bones and other refuse from the meats, fish, and other foods which contain them, and then remove the water from all the materials, and compare the actually nutritive substances or nutrients, their rank would, of course, be very different. Salt codfish, for instance, is a very economical food, because it furnishes protein in an easily digested form, although, as we buy it, a pound will contain over eight-tenths of a pound of water and refuse. A pound of rice consists of about seven-eighths of a pound, and a pound of potatoes only one-fourth of a pound of nutritive materials, but in cooking the rice we mix water with it and thus make it not very different in composition from potatoes. By drying the potatoes we could get a material very similar in food value to rice.

This report is prepared at a time when the estimates of percentages of nutrients in food materials are being changed from the basis of total quantities to that of quantities which are actually digestible and available. This change is the outgrowth of the investigations into the food and nutrition of man which are being carried on in different parts of the United States by authority of Congress and under the auspices of the United States Department of Agriculture. It is evident that the figures based upon the results of this extensive cooperative inquiry must become the standard in the United States. They are also being adopted by leading authorities in Great Britain. Since the present report is intended for future reference it is clearly desirable that the statistical data should be brought in accord with those which are thus coming into quite general use.

The statistics in my previous reports to the Commission were printed before the revised tables of composition and nutritive

values of materials and coefficients of availability of nutrients and energy were ready for use. The explanations and data here given will, it is hoped, suffice to indicate the changes involved in the transition from the old basis to the new, and facilitate the comparison of the two.

The detailed figures for nutrients and energy in the dietary studies and the proposed standards in the present report are given on the earlier basis in order to harmonize them with those in previous reports. The final summaries of the results of dietary studies and the dietary standards are, however, given on both bases for convenience of comparison.

The figures in the following table show the proportions of digestible or available nutrients and available energy in some of our more common American food materials. In making the computations the coefficients of availability and the factors for fuel value given on pp. 51 and 53 have been employed. The figures for total nutrients, i. e., actual composition of the food materials used as the basis of the table may be found in Table A, p. 106, of the 10th Annual Report of the New York State Commission in Lunacy.

The peculiar feature of this table, then, is that the figures for nutrients—protein, fats, carbohydrates and mineral matters, or “ash”—represent not the total but the digestible or available proportions.

TABLE C—Available nutrients and energy, and nutritive ratios of some common food materials

MATERIAL	Refuse	Water	AVAILABLE NUTRIENTS				Fuel value per pound	Nutritive ratio
			Protein	Fat	Carbo- hydrates	Ash		
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Calories	1:
<i>Animal food</i>								
Beef, fresh:								
Chuck and shoulder	16.3	52.6	15.0	14.3	.....	.6	915	2.1
Flank and plate	13.4	49.7	14.9	20.6	.....	.5	1,185	3.1
Loin	13.3	52.5	15.6	16.6	.....	.7	1,025	2.4
Neck	27.6	45.9	14.1	11.3	.....	.5	770	1.8
Ribs	20.8	43.8	13.5	20.0	.....	.5	1,130	3.3
Round	7.2	60.7	18.4	12.2	.....	.8	895	1.5
Shank and shin	45.4	37.1	10.9	5.9	.....	.4	470	1.2
Fore quarter	18.7	49.1	14.1	16.6	.....	.5	995	2.6
Hind quarter	15.7	50.4	14.9	17.4	.....	.5	1,045	2.6
Sides	17.4	49.4	14.4	17.2	.....	.5	1,030	2.7
Liver	7.0	66.2	18.9	4.0	1.6	1.1	580	.6
Beef, corned	13.3	39.0	11.9	30.9	.....	2.5	1,570	5.8
“ corned, canned	.....	51.8	25.5	17.8	.....	3.0	1,275	1.6
“ dried	4.7	53.7	25.6	6.6	.....	5.5	795	.6
Veal, fresh:								
Sides	22.6	55.2	15.1	6.0	.....	.6	560	.9
Lamb and mutton:								
Lamb sides	19.3	47.0	13.7	17.8	.....	.6	1,040	2.9
Mutton sides	18.1	45.4	12.6	21.9	.....	.5	1,195	3.9
Pork:								
Bacon	7.7	17.4	8.8	59.1	.....	3.1	2,720	15.1

TABLE C—Available nutrients and energy, and nutritive ratios of some common food materials—(Continued)

MATERIAL	Refuse	AVAILABLE NUTRIENTS				Water	Fuel value per pound	Nutritive ratio
		Protein	Fat	Carbo- hydrates	Ash			
<i>Animal food—(Continued)</i>	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Calories	1:	
Ham and shoulder, fresh	11.5	12.4	26.4	.....	.6	1,385	4.8
“ “ smoked	15.9	13.2	28.5	.....	3.7	1,490	4.9
Pork, salt, fat	.....	1.8	81.9	.....	2.9	3,565	*
Sides, fresh	11.5	7.8	46.5	.....	.4	2,160	13.4
Sausage:								
Bologna	3.3	17.7	18.7	.....	2.9	1,160	2.4
Frankfort	.....	19.0	17.7	1.1	2.6	1,160	2.1
Pork	.....	12.6	42.0	1.1	1.7	2,080	7.6
Poultry:								
Chickens and fowls	25.9	13.3	11.7	.....	.5	770	2.0
Turkeys	22.7	15.6	17.5	.....	.6	1,065	2.5
Fish, fresh:								
Blue	48.6	9.7	.6	.....	.5	225	.1
Cod, dressed	29.9	10.8	.2	.....	.6	220	.1
Flounders	61.5	5.2	.3	.....	.4	115	.1
Haddock	51.0	8.1	.2	.....	.5	170	.1
Mackerel	44.7	9.9	4.0	.....	.5	370	.9
Weak, whole	51.9	8.3	1.0	.....	.5	210	.3
White, whole	53.5	10.3	2.9	.....	.5	330	.6
Average fish, fat ¹	48.1	10.2	3.6	.....	.5	360	.8
“ lean ²	44.3	9.7	.5	.....	.5	215	.1
Fish, preserved:								
Cod, salt	24.9	15.5	.4	.....	13.9	325	.1
Halibut, smoked	7.0	18.7	13.3	.....	10.4	945	1.6

Mackerel, salt.....	19.7	34.8	13.5	20.1	.....	7.8	1,135	3.4
Salmon, canned	14.2	56.8	18.9	7.1	...	1.5	685	.8
Shellfish:								
Clams.....	.....	80.8	10.3	1.0	5.2	1.7	340	.7
Oysters, solids .....	.....	88.3	5.8	1.2	3.3	.8	225	1.0
Eggs, dairy products, etc.:								
Eggs, hens.....	11.2	65.5	11.5	8.8	.....	.7	615	1.7
Butter.....	.....	11.0	1.0	80.8	.....	2.3	3,410	*
Cheese, full cream .....	.....	34.2	25.1	32.0	2.4	2.9	1,885	3.0
Condensed milk.....	.....	26.9	8.5	7.9	54.1	1.4	1,460	8.5
“ “ unsweetened .....	.....	68.2	9.3	8.8	11.0	1.3	760	3.3
Milk, whole.....	.....	87.0	3.2	3.8	5.0	.5	310	4.2
“ skim .....	.....	90.5	3.3	.3	5.1	.5	170	1.8
Lard and cottonseed.....	.....	.....	.....	.....	95.0	.....	3,985	*
<i>Vegetable food</i>								
Cereals:								
Barley, pearled.....	.....	11.5	6.6	1.0	76.9	.8	1,640	11.7
Buckwheat flour.....	.....	13.6	5.2	1.1	76.7	.7	1,610	15.2
Corn meal .....	.....	12.5	7.5	1.7	74.3	.8	1,640	10.4
Hominy .....	.....	11.8	6.8	.5	77.7	.2	1,635	11.6
Oat breakfast foods.....	.....	7.8	13.4	6.6	65.9	1.4	1,805	6.0
Rice .....	.....	12.3	6.5	.3	77.7	.3	1,625	12.1
Rye flour .....	.....	12.9	5.3	.8	77.7	.5	1,620	15.0
Wheat:								
Flour, “high grade” patent.....	.....	12.4	8.7	.9	74.4	.4	1,630	8.8
“ bakers’ grade .....	.....	11.9	10.3	1.4	72.5	.5	1,650	7.3
“ low grade .....	.....	12.0	10.9	1.7	70.9	.7	1,645	6.9
“ blended .....	.....	12.0	9.7	1.2	73.2	.5	1,645	7.3

¹ Fat fish, such as mackerel, shad and whitefish.² Lean fish, such as bluefish, cod, flounders, haddock, hake, perch, pollocks and weakfish.

*The amount of protein too small for calculation of nutritive ratio.

TABLE C—Available nutrients and energy, and nutritive ratios of some common food materials—(Concluded)

MATERIAL	Refuse	Water	AVAILABLE NUTRIENTS				Fuel value per pound	Nutritive ratio
			Protein	Fat	Carbo-hydrates	Ash		
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Calories	1:
<i>Vegetable food—(Concluded)</i>								
Entire wheat.....	.....	11.4	10.7	1.7	71.6	.8	1,650	7.1
Graham flour.....	.....	11.3	10.3	2.0	71.1	1.3	1,645	7.3
Wheat breakfast food.....	.....	9.6	9.3	1.6	74.8	1.0	1,680	8.4
Crackers.....	.....	5.9	7.6	8.2	72.5	1.6	1,880	12.0
Macaroni, vermicelli, spaghetti, etc.....	.....	10.3	10.4	0.8	73.8	1.0	1,650	7.3
Bread, graham.....	.....	35.7	6.9	1.6	51.8	1.1	1,195	8.0
“ rye.....	.....	35.7	7.3	0.5	52.5	1.1	1,170	7.3
“ wheat.....	.....	35.3	7.1	1.2	52.8	0.8	1,200	7.8
Starches, sugars and oils:								
Cornstarch.....	.....	.....	.....	.....	88.2	.....	1,675	*
Sugar.....	.....	.....	.....	.....	98.0	.....	1,750	*
Molasses and syrup.....	.....	.....	.....	.....	68.6	.....	1,230	*
Cottonseed oil.....	.....	.....	.....	.....	95.0	.....	3,795	*
Tapioca.....	.....	11.4	0.3	0.1	86.2	0.1	1,650	*
Vegetables:								
Asparagus.....	.....	94.0	1.3	0.2	3.3	0.5	95	2.9
Beans, dried.....	.....	12.6	17.6	1.6	57.8	2.6	1,520	3.5
“ string.....	7.0	83.0	1.6	0.3	6.7	0.5	165	4.6
“ lima, dried.....	.....	10.4	14.1	1.4	63.9	3.1	1,560	4.8
“ “ fresh.....	55.0	30.8	2.4	0.3	9.7	0.6	240	4.3
Beets.....	20.0	70.0	1.0	0.1	7.4	0.7	160	7.6
Cabbage.....	15.0	77.7	1.1	0.2	4.7	0.7	115	4.7
Carrots.....	20.0	70.6	0.8	0.2	7.1	0.7	155	9.4
Corn, green.....	61.0	29.4	0.9	0.4	7.4	0.2	175	9.2
“ canned.....	.....	76.1	2.1	1.1	18.3	0.7	430	9.9
Lettuce.....	15.0	80.5	0.7	0.2	2.5	0.6	70	4.2

Onions	10.0	78.9	1.1	0.3	8.6	0.4	195	8.4
Parsnips.....	20.0	66.4	1.0	0.4	10.4	0.8	230	11.3
Peas, green	45.0	40.8	2.7	0.2	9.6	0.5	235	3.7
“ canned .....	.....	85.3	2.7	0.2	9.6	0.8	235	3.2
“ split .....	.....	9.5	19.2	0.9	60.1	2.2	1,570	11.1
Potatoes	20.0	62.6	1.3	0.1	14.2	0.6	295	2.4
Spinach.....	.....	92.3	1.6	0.3	3.2	1.6	160	2.4
Squash	50.0	44.2	0.5	0.2	4.4	0.3	100	9.8
Succotash, canned .....	.....	75.9	2.7	0.9	18.0	0.7	425	7.4
Sweet potatoes	20.0	55.2	1.1	0.5	20.9	0.7	440	20.0
Tomatoes.....	.....	94.3	0.7	0.4	3.8	0.4	100	6.7
“ canned.....	.....	94.0	0.9	0.2	3.9	0.5	100	4.8
Turnips	30.0	62.7	0.7	0.1	5.5	0.5	120	8.1
Fruits and nuts:								
Apples	25.0	63.3	0.3	0.3	9.7	0.2	195	34.7
“ dried .....	.....	28.1	1.3	2.0	59.6	1.5	1,190	49.3
Apricots, canned .....	.....	81.4	0.7	.....	15.7	0.3	295	22.4
Bananas	35.0	48.9	0.6	0.4	13.0	0.5	265	23.2
Cranberries .....	.....	88.9	0.3	0.5	8.9	0.2	190	33.3
Dates, dried.....	10.0	13.8	1.5	2.2	63.6	0.9	1,275	45.7
Grapes	25.0	58.0	0.8	1.1	13.1	0.3	300	19.5
Jelly .....	.....	38.4	1.0	.....	53.8	0.5	995	53.8
Oranges	27.0	63.4	0.5	0.1	7.6	0.3	150	15.6
Peanuts	25.0	6.9	16.6	26.2	16.6	1.1	1,525	3.6
Peaches	6.0	79.9	0.8	.....	11.4	0.4	220	14.3
“ canned.....	.....	88.1	0.5	0.1	9.8	0.2	190	20.0
“ dried .....	.....	29.4	3.7	0.9	56.5	1.8	1,130	15.8
Pineapples, canned.....	.....	61.8	0.3	0.6	32.8	0.5	625	11.4
Prunes, dried	15.0	19.0	1.4	.....	56.1	1.5	1,045	40.1
Raisins, dried.....	10.0	13.1	1.8	2.7	61.8	2.3	1,270	37.7
Strawberries	5.0	85.9	0.7	0.5	6.4	0.5	150	10.7

* The amount of protein too small for calculation of nutritive ratio.

THE FITTING OF FOOD TO THE NEEDS OF THE BODY

Different people have different needs for nourishment. All are alike in that they must have protein for the building and repair of the bodily machine and fuel ingredients for warmth and work. But they differ widely in the amounts and proportions they require, and even among those in good health there are many who are obliged to avoid certain kinds of food, while invalids and people with weak digestions must often have special diet.

For the great majority of people in good health the ordinary food materials—meats, fish, eggs, milk, butter, cheese, sugar, flour, meal, potatoes and vegetables—make a fitting diet, and the main question is to use them in the kinds and proportions fitted to the actual needs of the body.

In the adjusting of diet to the demands of the body two things are especially important. One is that the food “agree” with the user. The other is that it furnish enough but not too much material for building and repair and for fuel.

While this principle is fundamental in food economy, many modifications in detail are needed to fit the food to the peculiarities of digestion and assimilation and general physiological demand of different individuals and classes of people, especially if they are not in normal health.

Some foods which are ordinarily wholesome and nutritious may be harmful to particular individuals, owing, perhaps, to deleterious compounds being formed during the process of digestion and assimilation. Thus some people cannot endure milk, others are made ill by eggs, still others suffer if they eat strawberries, and so on. Thus it seems to be literally true that “one man’s meat is another man’s poison.” On the other hand, some foods have at times a great value outside of their use for nourishment. Fruits and garden vegetables often benefit people greatly, not as nutriment merely, for they may have very little of actual nutrients, but because of the vegetable acids or other substances which they contain, and which sometimes serve a most useful purpose.

Food does more than to build tissue and yield energy. What it does in other ways—its value as medicine rather than nutriment—this is not the place to discuss.*

*See Farmers’ Bulletin No. 142 of the U. S. Department of Agriculture, on “Principles of Nutrition and Nutritive Values of Food”, by W. O. Atwater, from which some of the statements here are adopted.

DIETARIES AND DIETARY STANDARDS

The information gained from a study of the composition and nutritive value of foods may be turned to practical account by using it in planning diets for different individuals or classes of individuals or in estimating the true nutritive value of the food actually consumed by families or individuals. By comparing the results of many such investigations with the results of accurate physiological experimenting it is possible to learn about how much of each of the nutrients of common foods is needed by persons of different occupations and habits of life, and from this to compute standards representing the average requirements for food of such persons.

In order to determine the actual food consumption of a person or group of persons during a given time, recourse is had to dietary studies, i. e., studies of actual diets. Such studies involve the determination of the actual amounts and composition of the different kinds of food materials used during the period of study, which may be several days or weeks, the amounts and composition of the table and kitchen waste, and a census of the age, sex and occupation or condition of all persons fed. From these data are computed the amounts of nutrients and energy per person or per man per day in the food actually eaten.

During the last twenty-five years much of this practical application of the chemistry of food has been made in the study of actual dietaries. Such work has been done in England, Germany, Italy, Russia, Sweden, and elsewhere in Europe, and in Japan and other Oriental countries. Within the past dozen years extensive studies have also been made in the United States. The results of some of these studies are summarized in Table D, which includes also several dietary standards. The figures show the quantities of both total and available nutrients.*

*The fuel values represent the actual amounts of available energy, and may be computed from either the total or the digestible nutrients by use of the factors of table B above, namely, for each gram of total nutrients: protein 4.0, fat 9.9, and carbohydrates 4.0 calories; for each gram of digestible nutrients: protein 4.4, fat 9.4 and carbohydrates 4.1 calories.

TABLE D—Food consumption of persons in different circumstances, and proposed dietary standards
[Quantities per man per day]

	Number of studies included in averages	ACTUALLY EATEN			DIGESTIBLE			Fuel value	Nutri- tive ratio
		Protein	Fat	Carbo- hydrates	Protein	Fat	Carbo- hydrates		
		Grams	Grams	Grams	Grams	Grams	Grams	Calories	1:
<i>Persons with active work</i>									
Rowing clubs in New England	7	155	177	440	143	168	427	3,955	5.6
Bicyclists in New York	3	186	186	651	171	177	631	5,005	6
Football teams in Connecticut and California..	2	226	354	634	208	336	615	6,590	6.6
Prussian machinist	1	139	113	677	128	107	657	4,270	7
Swedish mechanics	5	189	110	714	174	104	693	4,590	5.3
<i>Persons with ordinary work</i>									
Farmers' families in eastern United States	10	97	130	467	89	124	453	3,415	8.2
Mechanics families in United States	14	103	150	402	95	143	390	3,355	7.5
Laborers' families in large cities of United States	12	101	116	344	93	110	334	2,810	6.3
Laborers' families in United States (more com- fortable circumstances) .	2	120	147	534	110	140	518	3,925	7.6
Russian peasants .....	.....	129	33	589	119	31	571	3,165	5.4
Swedish mechanics	6	134	79	523	123	75	507	3,330	5.5
<i>Professional men</i>									
Lawyers, teachers, etc., in United States	14	104	125	423	96	119	410	3,220	7.1
College clubs in United States	15	107	148	459	98	141	445	3,580	7.8
German physicians	2	131	95	327	121	90	317	2,680	4.3
Japanese professor	1	123	91	416	113	19	403	2,345	4

<i>Men with little or no exercise</i>									
Men (American) in respiration calorimeter.....	11	112	80	305	103	76	296	2,380	4.5
Men (German) in respiration apparatus.....	5	127	80	302	117	76	293	2,430	4
<i>Persons in destitute circumstances</i>									
Poor families in New York city.....	11	93	95	407	86	90	395	2,845	6.9
Laborers' families in Pittsburgh, Pa.....	2	80	95	308	74	90	299	2,400	6.8
German laborer's family.....	1	52	32	287	48	30	278	1,640	7.2
Italian mechanics.....	5	76	38	396	70	36	384	2,225	6.6
<i>Miscellaneous</i>									
Negro families in Alabama and Virginia.....	39	86	145	440	79	138	427	3,395	9.3
Italian families in Chicago.....	4	103	111	391	95	105	379	2,965	6.5
French Canadians in Chicago.....	5	118	158	345	109	150	335	3,260	6.2
Bohemian families in Chicago.....	8	115	101	360	106	96	349	2,800	5.3
Inhabitants Java village, Columbian exposition, 1893.....	1	66	19	254	61	18	246	1,450	4.7
Russian Jews in Chicago.....	10	137	103	418	126	98	405	3,135	5
Mexican families in New Mexico.....	4	94	71	613	86	67	595	3,460	8.7
Chinese dentist in California.....	1	115	113	289	106	107	280	2,620	4.9
Chinese laundryman in California.....	1	135	76	566	124	72	549	3,480	5.7
Chinese farm laborer in California.....	1	144	95	640	132	90	621	3,980	6.2
United States army ration, peace.....	.....	120	161	454	110	153	440	3,730	7.1
German army ration, peace.....	.....	114	39	480	105	37	466	2,725	5.2
<i>Dietary standards</i>									
Man at hard work (Voit).....	.....	145	100	450	133	95	437	3,270	4.9
Man at moderate work (Voit).....	.....	118	56	500	109	53	485	2,965	5.5
Man with very hard muscular work (Atwater).....	.....	175	*	*	161	*	*	5,500	7.2
Man with hard muscular work (Atwater).....	.....	150	*	*	138	*	*	4,150	6.2

* Fats and carbohydrates in sufficient amounts to furnish, together with the protein, the indicated amount of energy.

TABLE D—Food consumption of persons in different circumstances, etc.—(Concluded)

	Number of studies included in averages	ACTUALLY EATEN			DIGESTIBLE			Fuel value	Nutritive ratio
		Protein	Fat	Carbo-hydrates	Protein	Fat	Carbo-hydrates		
Grams	Grams	Grams	Grams	Grams	Grams	Calories			
<i>Dietary standards—(Concluded)</i>									
Man with moderately active muscular work (Atwater)	125	*	*	115	*	*	3,400	6.2
Man with light to moderate muscular work (Atwater)	112	*	*	103	*	*	3,050	6.1
Man at "sedentary" or woman with moderately active work (Atwater)	100	*	*	92	*	*	2,700	6.1
Woman at light to moderate muscular work, or man without muscular exercise (Atwater)	90	*	*	83	*	*	2,450	6.1

* Fat and carbohydrates in sufficient amounts to furnish, together with the protein, the indicated amount of energy.

The dietary standards given in the above table are based, as far as possible, upon the results of observation and experiment, but are at best general estimates and not guides to be blindly followed. Those by myself are subject to revision in the light of further experimental evidence. It will be observed that the amounts of energy they provide are somewhat larger than in the European standards (Voit's). This corresponds to the observed fact that people in this country, more especially the working people, are as a rule better fed and do more work than those of corresponding classes in Europe. The quantities of protein in these standards are larger in proportion to the fuel ingredients—that is the nutritive ratios are narrower—than are found in the average American diet. In this respect the standards agree more nearly with the diet of well-to-do people in Europe. The amounts of protein best fitted to the needs of people of different classes is one of the vexing questions of physiology. My own present opinion is that when a standard is called for, it is better to err on the safe side and assign too much protein than too little.

SPECIAL CONSIDERATIONS REGARDING DIETARIES FOR THE INSANE

I venture to recapitulate a few statements in my second report.* They were to the effect that:

1. The physiological demand for nourishment differs materially with different classes of patients and likewise with different patients of the same class.

2. The question of individual differences is one for consideration in the dining-room. To fit food to the demand of the individual patient requires thought and care on the part of the attendant who serves the food.

3. The fitting of the food to the demands of a particular class of patients requires, first, the proper classification, and second, the study of the general demands of the patients of each class.

* Eleventh Annual Report of the N. Y. State Commission in Lunacy, pp. 201-7.

CLASSIFICATION OF PATIENTS BY DIETETIC NEEDS

Not enough is yet known of the physiological demands of the insane for nourishment to warrant the attempt at a classification on this basis alone. Even if such a classification were made it might not be fitted to practical hospital purposes.

The following attempt toward a classification has been made for use in these reports. It takes into account: (a) differences in physiological need; (b) the divisions of patients actually recognized in New York hospitals; and (c) the fact that in the kitchens of any institution only a limited number of dietaries can be prepared, hence the number of classes must be small. On this basis the hospital population may be separated into four classes.

1. The infirm, including the unproductive, inactive and unappreciative chronic patients.

2. The workers, including those chronic patients engaged in productive employments, and the more active of the restless and disturbed patients.

3. The acute, including all patients recently admitted, and the sick.

4. The employees.

This classification separates the population of the hospital into divisions with widely differing dietary needs. It is a matter of common observation that, of the patients, workers need more substantial nourishment than do the infirm, and that the acute and also the sick among the chronic need more careful attention to the adaptation of the food to the individual than do the chronic workers or non-workers. We can also assume that the employees, representing a class of normal people, on the average decidedly younger in age than the patients, working actively and earning their own living, may reasonably be provided with a somewhat different diet. The force of this classification is more apparent when we consider that the bulk of the population of the hospital is made up of patients of the chronic class, and that a very considerable percentage of these are

unproductive and comparatively inactive. Thus the proportion of people requiring more than a simple diet is very small.

From the standpoint of the physiological demand, the above classification is somewhat crude because of the difference in demand of people here classed together. For instance, those of the second class, designated as workers, include some who have extremely little muscular exercise, and others with employments which at times correspond with those of men and women at very active muscular work. Thus, a man who spends two or three hours a day in moving a polisher over the floor of a ward is classed as a worker; but his muscular activity does not compare with that of the patients who are hoeing corn on the farm or handling coal in the boiler house. It would be more logical and accurate to subdivide the workers into classes corresponding to their activity and their physiological demand for nutriment, but the difficulty of recognizing the difference in the dealing out of the food from the kitchen is a practical objection to such a subdivision in the hospitals as generally organized.

PHYSIOLOGICAL DEMANDS OF DIFFERENT CLASSES OF THE INSANE FOR NUTRIMENT

It must not be forgotten that the physiological demand is here measured simply in terms of nutrients and energy. My own decided impression is that the principal factor of the demand as thus measured is the degree of physical activity. This theory assumes that mental activity plays an inferior role in regulating the demand.

In discussing this latter question we must distinguish between two different things; the consumption of material and energy in brain work or nervous tension, and the regulating influence which the brain exercises upon metabolism.

Mental activity as related to consumption of nutriment.—There is a common belief that the oxidation of material in the body increases with mental as with muscular activity. The subject is too complex for discussion here, but I may say that I have been unable to find any large amount of definite experimental

evidence in support of the belief. In a large number of experiments with men in my own laboratory the amount of material oxidized has risen and fallen regularly with the amount of muscular work done. The effect of severe mental work has been tested on only one case. In this instance a young, healthy, active man, an assistant in our experimental inquiries, was found to oxidize practically the same amounts of material in his body during three consecutive days devoted to intense mental work in studying a German treatise on physics and in mathematical calculations as he had oxidized in the three previous days when he had led as nearly a vegetative existence as possible. When, however, in the same series of experiments, he engaged in active muscular work the oxidation was greatly increased.* “One swallow does not make a summer,” nor does a single experiment of this sort prove a principle. We may learn later that there is a very important connection between mental activity on the one hand and the consumption of food or body material on the other. It is possible, furthermore, that nervous strain may increase metabolism in larger degree than intellectual activity. What I wish to urge here is that in the present condition of our experimental knowledge there is no sufficient ground for assuming that increase of either mental activity or nervous strain calls for an at all equivalent increase of either the protein or the energy of the food.

The brain as a regulator of metabolism.—Regarding this, I venture to quote the following from my last report:

“With the advance of physiological science we are coming to realize that one of the most important functions of the brain is to regulate the metabolism. We are finding that there are mental states in which this regulation is abnormal, but we have as yet no very clear idea as to the nature of that regulation when it is normal, or the conditions which make it abnormal, or the effect of any given form of mental disease in this respect. * * * Whether this regulation is exercised from nerve centers within or outside the brain is not germane to this discussion. The point is this: Such forms of metabolism as the

* See pp 51-56 Bulletin 44 of the Office of Experiment Stations, U. S. Department of Agriculture, on Preliminary Investigations on the Metabolism of Nitrogen and Carbon in the Human Organisms, by Atwater, Woods and Benedict.

cleavage of proteids of either food or protoplasm which accompanies muscular exertion, or the oxidation of carbohydrates or fats by which the energy potential in those compounds is made kinetic and available for that muscular work are somehow under the control of nerve centers. In normal bodily conditions, and with a normal supply of food material, that control is so exercised that the quantity of material metabolized is more or less nearly proportional to the muscular work done. It is possible that there may be forms of mental disease in which the control of metabolism by the nervous system is interfered with so that the amount of material metabolized does not accord with the demand. In such cases, if they occur, the body might transform a much larger amount of material in order to accomplish a given amount of work than would be necessary if the regulation were normal. Such a theoretical condition might be compared to that of a manufacturing establishment in which the engineer should fail to do his duty and consequently the amount of coal burned in the furnace to keep the machinery in motion would be excessive. People in such condition might need more food than those in mental health with corresponding physical activity. My own limited experience, however, has not made me familiar with any form of mental disease or with any class of the insane to which this description would apply. In other words, I have not become familiar with any class of patients whose food requirement seems to me to be in excess of the demand due to muscular or mental activity.

"I have thus far been speaking of the automatic regulation of metabolism by the nervous system. There is, however, a voluntary control of the amount of food consumed. The control thus exercised may be either instinctive or intentional, but with people in normal condition it is a most important factor in regulating the food consumption. When a man is in mental health, his sense of hunger and his judgment or instinct tell him more or less accurately when he has eaten enough, but the person with imperfect mental development, as the idiot or imbecile, may be without even the instinctive consciousness that his needs are satisfied. If the food is set before him he may continue to eat as long as the comfortable feeling continues, even if in so doing he eats to a great excess. Such persons may seem to need large quantities of food, but it is doubtful whether this is an indication of real physiological demand, and whether it may not be an injury and hence a wrong to the patient to allow him to gratify this inclination.

"On the other hand, there seem to me to be indications that a loss of mentality may be accompanied by diminished physiological demands for nutriment. Certainly, the instances re-

ported beyond of the actual food consumption of patients of the infirm class, a large number of whom were vegetative demented, show that the quantities of food eaten were so small as to at best suggest that when the low mental activity thus occurs with low physical activity, the food requirement is reduced to a minimum."

It has been suggested that terminal demented may digest their food less completely than if they were in normal health, and hence may require more food to meet the physiological demand than would otherwise be necessary. This may be true. I know of no experimental evidence to decide the question, one way or the other, beyond the investigations by Dr. Aldrich of the Buffalo State Hospital referred to in the introduction to this report (page 40). In these the digestion of food by a number of patients of the infirm class was tested and found to differ but little from that with people in health. These experiments have not yet been carried out with such numbers of patients of different classes as to warrant definite and final conclusions, but so far as they go they hardly favor the view that the digestive powers of demented are so enfeebled as to materially increase their demand for food.

Conclusion. Need of exact experiments.—My own impression, at present, is that the chief factor in deciding the need of food requirement, as expressed in terms of protein and energy, is the bodily activity. Taking the facts as I have thus far found them, I am inclined to think that the physiological demand of the insane for nutriment, so far from being larger, is, on the whole, rather smaller than that of people in mental health and with corresponding physical activity. I express this, however, as a present impression and not as a generalization warranted by long continued and accurate test, and I desire to emphasize the need of appropriate experiment for studying the dietary needs of patients of different classes in hospitals for the insane.

The above statements regarding the physiological demands of the insane for nutriment are intended to apply to the chronic rather than to the acute classes. The needs of the latter I do not attempt to discuss, as they are varied and require the

special attention which only the experienced physician is competent to give. There are, indeed, patients for whom a liberal diet appears to be decidedly beneficial, as is illustrated by the success of the Weir-Mitchell treatment in some cases of insanity.*

The subject of physiological demand of the insane for nutriment will be referred to later in summarizing the results of the inquiry.

DIETARY STUDIES IN NEW YORK HOSPITALS FOR THE INSANE

The most important feature of the inquiry which terminates with this report has been the dietary studies in the different hospitals. The object of this was to learn the kinds and amounts of food actually eaten by the different classes of the hospital population and incidentally the amounts of waste; they thus formed the first and most essential step toward a complete study of the subject of the economy of hospital dietetics.

As an introduction, an attempt was made in 1897-98 to learn from the official records the kinds and amounts of food supplied to the several hospitals and the system as a whole, to estimate the quantities of nutrients and energy in the food supplied and to compare these with the amounts found in other dietaries and with current dietary standards for people in normal condition. With regard to this introductory period of the work the following may be quoted from the preliminary report given in the Tenth Annual Report of the New York State Commission in Lunacy:

"To find the amounts of food and nutrients actually consumed in the New York hospitals I have had recourse to statistics kindly furnished by the State Commission in Lunacy. These are for the year from September 1, 1897, to August 31, 1898, inclusive. They show the total quantities of food materials of different kinds consumed during the year and the 'average daily attendance,' i. e., the average number of people, officers, employees and patients, male and female, who are nourished by

* See, for instance, the experiments of Bleibtreu, in which this treatment was used for hysteria. Pfleger's Archiv. 41, pp. 409, 410.

the food. The figures for each hospital are given in the appendix of the report. The quantities of nutrients and energy per person per day are summarized in the following table:

Quantities of nutrients and energy in total food supply per person per day in the New York hospitals for the insane, 1897-98

HOSPITAL	Protein		Fat		Carbohydrates		Energy
	Grams	Pounds	Grams	Pounds	Grams	Pounds	Calories
Binghamton.....	113	.25	139	.31	439	.97	3,555
Buffalo.....	110	.24	142	.31	414	.92	3,470
Hudson River.....	116	.26	144	.32	403	.89	3,470
Long Island.....	111	.24	135	.30	425	.94	3,455
Manhattan.....	121	.27	141	.31	517	1.11	3,930
Middletown.....	106	.23	130	.29	342	.75	3,045
Rochester.....	108	.24	132	.29	379	.84	3,225
St. Lawrence.....	129	.28	148	.33	513	1.13	4,010
Utica.....	109	.24	131	.29	393	.88	3,295
Willard.....	110	.24	130	.29	437	.96	3,450
Average.....	113	.25	137	.30	427	.91	3,490

"The quantities of protein, fats and carbohydrates are expressed in both grams and pounds, the former being the usual unit employed in studies of this kind and the latter the more familiar unit. It will be noticed that the amount of protein per person per day ranged from 106 to 129 grams and averaged 113 grams (.24 pounds). The amount of fat ranged from 130 to 148 grams per person per day and averaged 137 grams (.30 pound). The smallest amount of carbohydrates found was 342 grams per person per day, the largest 517 grams, the average being 427 grams (.94 pound). The amount of energy in the daily food ranged from 3045 to 4010 calories, the average being 3490, or practically 3500 calories. The smallest diet appeared to have been that of the Middletown hospital, the largest that of the St. Lawrence hospital."

These values represent nutrients in the total food purchased and not the nutrients in the food eaten. The latter could not be determined from the statistics given, since there was no record of the amount of waste. Just how these amounts would compare with the actual needs of the person fed was not evident, since the needs of the different classes of hospital population for nutriment were not known. It was possible to make a tentative estimate of those needs, however. This was considerably below the food supplied.

Just how much a proper physiological standard for the different classes of the hospital population would call for could be

answered best by the test of actual experiment. The first step toward establishing such a standard would be to find out exactly how much the people were actually eating. This could be accomplished by dietary studies. The next step would be to try experiments with different classes of the population, modifying the dietary in one way or another and observing the effects upon the health, comfort and welfare of the population. Accordingly dietary studies were undertaken the following year, 1898-99, and were continued in 1899-1900 in different hospitals. One or more chemists who had had experience in such investigations visited the hospitals for this purpose and were there assisted by members of the hospital force and by persons especially employed for the purpose.

The general character and method of the dietary studies are shown by the details given in the appendix to the present report, p.195 *et seq.* In brief, the method consisted of observing the actual quantities of different food materials supplied to a given number of patients of a given class for a certain period, as, for instance, a week. The food materials themselves were weighed as were the amounts served at the table and the amounts left uneaten. Chemical analyses were made when necessary. The number of persons nourished by the food in each case was carefully noted. From the data thus obtained could be determined the quantities of nutrients and energy contained in the food served at the table, the food actually eaten, and in the waste.

GENERAL OUTLINE OF THE WORK DONE

Dietary studies have been conducted in the Brooklyn and Kings Park Departments of the Long Island State Hospital and in the St. Lawrence and the Willard State Hospitals. In all 56 studies have been made.

Studies previously reported in detail.—The studies at the Brooklyn Department of the Long Island State Hospital were carried on with the courteous assistance of the general superintendent, Dr. O. M. Dewing, and the superintendent of the Brooklyn Department, Dr. R. M. Elliot. The work was under the immedi-

ate care of Dr. H. E. Wells. In all there were eight studies, divided into two series, the first series being made in December, 1898, and the second, which was a repetition of the first, in January, 1899. The object of the duplication of studies in this and other hospitals was to verify the results and thus make their reliability more certain.

The most extensive series of observations during this investigation were those in the St. Lawrence State Hospital at Ogdensburg. The superintendent, Dr. William Mabon, took a very active interest from the start, as did also a number of the other officers of the institution, including especially Dr. W. H. Kidder, who, with Dr. Wells, looked after the details of the investigations in this hospital. The observations were made during the months of March, April and July, 1899. All but a comparatively small number of the population of the hospital were included in the 32 studies thus carried out. These studies were divided into six series and all were made in duplicate, with intervals of either a few weeks or a few months between the first study and the repeat.

Studies described in detail in the present report.—The studies at the Willard State Hospital were undertaken with the very courteous cooperation of the superintendent, Dr. W. A. Macey. The larger part of the observations were made by Dr. W. Steinach, who had become much interested in the investigations. Two series, comprising six studies, were carried to a successful completion. The first series included 4, and the second 2 studies, the latter being repetitions of two of the first series. It was intended to continue these observations for a longer time but circumstances rendered this infeasible. The classes of patients studied included male and female workers and male and female non-workers, all belonging to the chronic, quiet, demented class.

Through the continued interest and hearty cooperation of Dr. O. M. Dewing, a further series of investigations was made possible in the Kings Park Department of the Long Island Hospital. Two series of studies were there prosecuted. The first series, comprising 5 studies, was made in February 1900, and the

second series, which was a repetition of the first, was made in July, 1900. The dietary studies in February were made under the immediate supervision of Miss E. R. Rushmore, who has for some time past served very efficiently in the capacity of chef, and Dr. H. E. Wells, who had been engaged in similar inquiries in some of the other hospitals. The details of the duplicate studies the following July were carried out under the direction of Dr. Wells, aided by Mr. H. A. Pratt, a student at Wesleyan University, who has assisted to some extent in these investigations. Mr. C. F. Hale, also a student in Wesleyan University, did much work in connection with the computation of the results of the 16 dietary studies here reported in detail, and in other ways.

Mr. A. P. Bryant, who has been connected with the nutrition investigations under my charge for several years, has likewise assisted in these investigations, more especially by taking charge of the details of the computations and preparation of the tabular and other parts of the work which has been done at Middletown, Conn.

A catalogue of the dietary studies made at the different hospitals showing the classification of the patients and number of persons included in each study will be found in the Appendix, preceding the details of the dietary studies.

The results of 40 studies made at the Brooklyn Department of the Long Island and at the St. Lawrence State Hospitals were reported in detail in the Eleventh Annual Report of the State Commission in Lunacy. The detailed results of 16 additional studies, six at the Willard State Hospital and ten at the Kings Park Department of the Long Island State Hospital, are given in the Appendix to the present report. The results of all of the 56 studies are summarized in Tables F to J beyond.

APPROXIMATE NUMBER OF PERSONS WHOSE DIETARIES WERE STUDIED

During the progress of these investigations the actual food consumption of nearly 4,200 persons was studied, and in the majority of cases, as already explained, duplicate studies were

made after intervals varying from a few weeks to a few months. Of these 4,200 persons about 350 were employees and the remainder patients. Among the patients there were not far from 2,100 women and 1,730 men. The approximate number of male and female patients and employees studied at the different hospitals is shown in the following table.

TABLE E—*Approximate number of persons whose dictaries have been studied*

	PATIENTS			EMPLOYEES			Total
	Male	Female	Total	Male	Female	Total	
Long Island State Hospital:							
Brooklyn Dep't.....	143	165	308	.....	.....	.....	308
Kings Park Dep't.....	418	770	1,188	.....	.....	111	1,299
St. Lawrence State Hospital.....	593	630	1,223	97	143	240	1,463
Willard State Hospital.....	572	546	1,118	.....	.....	.....	1,118
Total.....	1,726	2,111	3,837	97	143	351	4,188

SUMMARY OF RESULTS OF DIETARY STUDIES IN STATE HOSPITALS FOR THE INSANE

Table F summarizes the main results of the 56 dietary studies carried on at the Long Island (Brooklyn and Kings Park Departments), St. Lawrence and Willard State Hospitals. The figures for studies Nos. 1-40 are taken from the detailed table in the Appendix to the Second Report on Dietaries for Hospitals for the Insane, which was included in the Eleventh Annual Report of the State Commission in Lunacy, and those for studies Nos. 41-56 from the Appendix to the present report. They show the average numbers of persons included in the different studies, the daily amounts of protein, fats and carbohydrates in the food served, rejected and eaten at the tables, and the estimated fuel values of these nutrients. No account is made of kitchen waste.

In the case of the patients the sexes ate in different dining rooms, and the figures show the food consumption of different classes of male and female patients. The male and female attendants, however, ate at the same table. Where the actual number of each sex was recorded the results are expressed not only in terms of per person per day, but in terms of per man

per day, on the assumption that a woman eats 0.8 as much as a man. In some instances, however, the actual numbers of men and women were not recorded and the figures represent the food consumption, per person per day, of a group of persons composed approximately of equal numbers of males and females.

The quantities of food rejected represent what has been termed table waste, and include the portions left uneaten on or about the individual plates. Material left on the dishes from which the food was served and returned to the kitchen for further use is not included here. It will be observed that the quantities of food eaten represent the differences between the total amounts served and the amounts rejected.

The results of the studies are grouped according to the class of patients, the sex, and the degree of muscular activity. It is to be observed, however, that the grouping is not strictly accurate. Thus, with the infirm may be classed a few patients in comparatively robust health who did ward work and might better be classed as workers; these were all classed together for the reason that it was not feasible to feed separately those who could do some work and those who could do none. In the studies at the Willard and the Kings Park department of the Long Island State hospitals a much broader classification is made than in the studies in the St. Lawrence State Hospital, so that the results obtained in one hospital are not strictly comparable with those of the corresponding group in the other hospital, with which for convenience it is classified in Table F, but, rather, are intermediate between two groups. For example, dietary studies Nos. 41 and 45, of quiet, demented, non-working male patients at the Willard State Hospital, are classified for convenience with the chronic infirm males at the St. Lawrence and the Brooklyn department of the Long Island State hospitals, although a large number of the patients were not strictly infirm. The same is true of dietary study No. 44 at the Willard State Hospital, which included a considerable number of female patients who were physically capable of doing light work.

TABLE F

FOOD CONSUMPTION OF NEW YORK STATE HOSPITAL POPULATION, BY CLASSES.—DIETARY STUDIES 1898-1900

Nutrients and energy in food served, rejected and eaten per person per day

Reference number of study	STATE HOSPITALS AND CLASSES OF PEOPLE	Number of persons	NUTRIENTS									ENERGY		
			PROTEIN			FAT			CARBOHYDRATES			Served	Rejected	Calories
			Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten			
3	PATIENTS, CHRONIC <i>Infirm males</i> Long Island, Brooklyn Dept., December, '98.....	49	70	2	68	60	2	58	355	10	345	2,300	68	2,232
7	Long Island, Brooklyn Dept., January, '99.....	45	64	3	61	65	3	62	349	17	332	2,298	110	2,188
11	Average Nos. 3 and 7.... St. Lawrence, Infirmary Group, March, '99	86	67	2	65	62	2	60	352	13	339	2,294	80	2,214
27	St. Lawrence, Infirmary Group, April, '99	87	65	6	59	57	3	54	335	28	307	2,170	167	2,003
41	Average Nos. 11 and 27... Willard, March, '99	288	72	9	63	58	4	54	355	34	321	2,290	213	2,077
45	Willard, April, '99	280	69	8	61	58	4	54	345	31	314	2,237	197	2,040
49	Average Nos. 41 and 45... Long Island, Kings Park Dept., February, 1900	110	76	3	73	70	2	68	406	8	398	2,628	64	2,564
			80	4	76	74	3	71	382	14	368	2,583	101	2,482
			78	4	74	72	3	69	394	11	383	2,605	89	2,516
			72	2	70	56	2	54	312	5	307	2,095	47	2,048

54	Long Island, Kings Park Dept., July, 1900.....	124	85	2	83	77	.....	77	288	11	277	2,246	53	2,193
	Average Nos. 49 and 54.....	.....	78	2	76	67	1	66	300	8	292	2,173	50	2,123
	Average Nos. 3, 7, 11, 27, 41, 45, 49, 54.....	.....	73	4	69	65	2	63	348	16	332	2,331	101	2,230
	<i>Infirm females</i>													
4	Long Island, Brooklyn Dept., December, '98.....	50	53	6	47	49	5	44	283	28	255	1,833	186	1,647
8	Long Island, Brooklyn Dept., January, '99.....	50	45	4	41	46	3	43	257	20	237	1,666	126	1,540
	Average Nos. 4 and 8.....	.....	49	5	44	48	4	44	270	24	246	1,754	156	1,598
12	St. Lawrence, Infirmary Group, March '99.....	99	53	7	46	46	3	43	248	30	218	1,662	180	1,482
28	St. Lawrence, Infirmary Group, April, '99.....	99	60	9	51	53	5	48	271	34	237	1,850	223	1,627
	Average Nos. 12 and 28.....	.....	57	8	49	50	4	46	260	32	228	1,764	201	1,563
44	Willard.....	275	58	2	56	56	1	55	266	6	260	1,849	42	1,807
50	Long Island, Kings Park Dept., February, 1900.....	150	66	4	62	53	2	51	253	13	240	1,800	88	1,712
55	Long Island, Kings Park Dept., February, 1900.....	183	66	4	62	63	1	62	231	12	219	1,804	75	1,729
	Average Nos. 50 and 55.....	.....	66	4	62	58	2	56	242	13	229	1,802	88	1,714
	Average Nos. 4, 8, 12, 28, 44, 50, 55.....	.....	57	5	52	52	3	49	258	20	238	1,775	130	1,645
	<i>Light workers and disturbed males</i>													
20	St. Lawrence, Central Group, March, '99.....	166	79	4	75	63	2	61	370	13	357	2,427	89	2,338

TABLE F.—FOOD CONSUMPTION OF NEW YORK STATE HOSPITAL POPULATION, ETC.—(Continued)

Reference number of study	STATE HOSPITALS AND CLASSES OF PEOPLE	Number of persons	NUTRIENTS									ENERGY		
			PROTEIN			FAT			CARBOHYDRATES			Served	Rejected	Calories
			Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten			
33	St. Lawrence, Central Group, July, '99	152	76	5	71	72	3	69	350	17	333	2,416	118	2,298
	Average Nos. 20 and 33.....		78	5	73	67	2	65	360	15	345	2,418	100	2,318
	<i>Light workers and disturbed, females</i>													
24	St. Lawrence, Central Group, March, '99.....	148	52	3	49	57	1	56	219	15	204	1,641	83	1,558
37	St. Lawrence, Central Group, July, '99.....	155	50	4	46	57	3	54	241	17	224	1,723	114	1,609
	Average Nos. 24 and 37.....		51	3	48	57	2	55	230	16	214	1,682	96	1,586
48	Long Island, Kings Park, February, 1900.....	520	66	2	64	45	1	44	274	6	268	1,812	42	1,770
53	Long Island, Kings Park, July, 1900.....	587	67	3	64	59	1	58	286	10	276	1,996	63	1,933
	Average Nos. 48 and 53.....		67	3	64	52	1	51	280	8	272	1,906	54	1,852
	Average Nos. 24, 37, 48, 53.....		59	3	56	55	2	53	255	12	243	1,799	80	1,719

<i>Restless, active, disturbed, males</i>														
14	St. Lawrence, Group III, March, '99	129	97	5	92	106	8	98	437	18	419	3,175	169	3,006
39	St. Lawrence, Group III, July, '99	129	106	8	98	67	3	64	376	13	363	2,599	114	2,485
	Average Nos. 14 and 39	.....	102	7	95	87	6	81	407	16	391	2,896	150	2,746
<i>Restless, active, disturbed, females</i>														
15	St. Lawrence, Group III, March, '99	224	63	4	59	68	2	66	334	21	313	2,260	121	2,139
40	St. Lawrence, Group III, July, '99	224	56	3	53	52	1	51	271	12	259	1,824	71	1,753
	Average Nos. 15 and 40	.....	60	4	56	60	2	58	302	16	286	2,042	100	1,942
23	St. Lawrence, Central Group, March, '99	86	69	6	63	61	3	58	283	23	260	2,011	147	1,864
36	St. Lawrence, Central Group, July, '99	86	62	3	59	65	2	63	297	15	282	2,076	92	1,984
	Average Nos. 23 and 36	.....	66	5	61	63	3	60	290	19	271	2,045	126	1,919
	Average Nos. 15, 40, 23, 26	.....	63	5	58	61	2	59	296	18	278	2,039	113	1,926
<i>Workers, males</i>														
1	Long Island, Brooklyn Dept., December, '98	96	89	5	84	93	5	88	350	8	342	2,665	100	2,565
5	Long Island, Brooklyn Dept., January, '99	96	75	5	70	88	6	82	347	15	332	2,549	138	2,411
	Average Nos. 1 and 5	.....	82	5	77	91	6	85	349	12	337	2,613	125	2,488

TABLE F.—FOOD CONSUMPTION OF NEW YORK STATE HOSPITAL POPULATION, ETC.—(Continued)

Reference number of study	STATE HOSPITALS AND CLASSES OF PEOPLE	Number of persons	NUTRIENTS									ENERGY				
			PROTEIN			FAT			CARBOHYDRATES							
			Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten		
			Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
10	Workers, males—(Continued)															
	St. Lawrence, Infirmary Group, March, '99.....	60	117	15	102	97	9	88	410	28	382	3,063	260		2,803	
26	St. Lawrence, Infirmary Group, April, '99.....	60	117	16	101	99	12	87	412	32	380	3,090	309		2,781	
	Average Nos. 10 and 26.....	.....	117	15	102	98	10	88	411	30	381	3,076	277		2,799	
19	St. Lawrence, Central Group, March, '99.....	104	117	9	108	99	7	92	463	18	445	3,299	176		3,123	
32	St. Lawrence, Central Group, July, '99.....	108	136	7	129	87	4	83	476	16	466	3,318	131		3,187	
	Average Nos. 19 and 32.....	.....	127	8	119	93	5	88	470	17	453	3,313	149		3,154	
42	Willard, February, '99.....	284	96	4	92	96	3	93	476	19	457	3,239	122		3,117	
46	Willard, April, '99.....	278	115	7	108	94	5	89	458	20	438	3,224	157		3,067	
	Average Nos. 42 and 46.....	.....	106	6	100	95	4	91	467	20	447	3,233	144		3,089	
47	Long Island, Kings Park, February, 1900.....	215	122	4	118	127	1	126	424	14	410	3,420	84		3,336	
52	Long Island, Kings Park, July, 1900.....	294	122	7	115	86	3	83	407	11	396	2,969	101		2,868	
	Average Nos. 47 and 52.....	.....	122	6	116	107	2	105	416	13	403	3,201	97		3,104	
	Average Nos. 1, 5, 10, 26, 19, 32, 42, 46, 47, 52.....	.....	111	8	103	97	6	91	422	18	404	3,087	162		2,925	

2	<i>Workers, females</i> Long Island, Brooklyn Dept., December, '98.....	113	63	9	54	74	10	64	240	21	219	1,930	216	1,714
6	Long Island, Brooklyn Dept., January, '99.....	117	54	6	48	73	7	66	233	16	217	1,855	155	1,700
	Average Nos. 2 and 6.....	.....	58	7	51	73	8	65	236	18	218	1,884	177	1,707
43	Willard	271	58	7	51	68	5	63	269	23	246	1,973	169	1,804
	Average Nos. 2, 6, 43.....	.....	58	7	51	72	7	65	247	20	227	1,920	176	1,744
	PATIENTS, ACUTE													
17	<i>Recent admissions, males</i> St. Lawrence, Central Group, March, '99.....	33	86	7	79	104	4	100	419	18	401	3,038	140	2,898
30	St. Lawrence, Central Group, July, '99.....	37	60	8	52	79	6	73	356	26	330	2,440	195	2,245
	Average Nos. 17 and 30.....	.....	72	7	65	91	5	86	386	23	363	2,724	169	2,555
	<i>Recent admissions, females</i>													
21	St. Lawrence, Central Group, March, '99.....	49	50	6	44	63	3	60	218	26	192	1,684	159	1,525
34	St. Lawrence, Central Group, July, '99.....	51	35	8	27	54	6	48	185	27	158	1,404	199	1,205
	Average Nos. 21 and 34.....	.....	42	7	35	58	4	54	202	27	175	1,540	177	1,363
	<i>Acute, with some sick chronic, males</i>													
18	St. Lawrence, Central Group, March, '99.....	18	75	4	71	81	1	80	394	18	376	2,676	99	2,577
31	St. Lawrence, Central Group, July, '99.....	17	64	3	61	81	2	79	364	12	352	2,508	80	2,428
	Average Nos. 18 and 31.....	.....	70	4	66	81	1	80	379	15	364	2,594	87	2,507

38	St. Lawrence, Group III, July '99; men 22, women 41.....	63	66	11	55	98	6	92	285	40	245	2,350	265	2,085
	Same, estimated per man.....	.....	76	12	64	112	7	105	326	46	280	2,690	303	2,387
	Average Nos. 13 and 38.....	.....	74	11	63	107	7	100	311	41	270	2,573	278	2,295
	Same, estimated per man.....	.....	86	13	73	123	9	114	356	47	309	2,956	330	2,626
16	St. Lawrence, Central Group, March '99; men 60, women 78	138	85	9	76	116	3	113	384	38	346	3,002	221	2,781
	Same, estimated per man.....	.....	96	10	86	130	3	127	432	43	389	3,374	245	3,129
29	St. Lawrence, Central Group, July '99; men 60, women 78	138	87	10	77	135	3	127	334	38	296	2,981	271	2,710
	Same, estimated per man.....	.....	97	11	86	151	9	142	375	42	333	3,340	301	3,039
	Average Nos. 16 and 29.....	.....	86	10	76	126	6	120	359	38	321	2,996	252	2,744
	Same, estimated per man.....	.....	97	11	86	141	6	135	403	42	361	3,361	273	3,078
51	Long Island, King's Park, February 1900	111	126	19	107	189	18	171	472	37	435	4,210	396	3,814
56	Long Island, King's Park, July 1900	104	135	13	122	186	11	175	430	22	408	4,046	245	3,801
	Average Nos. 51 and 56 (person) .....	.....	131	16	115	188	15	173	451	30	421	4,135	328	3,807

DISCUSSION OF THE RESULTS

The 56 dietary studies summarized in the above table were carried on mainly to obtain light upon the questions: (1) What is the actual food consumption of different classes of the insane? (2) What is the proper physiological standard for the maintenance of the hospital population as a whole? In addition to their bearing upon these two questions, the results obtained may be considered with reference to several minor topics, among which are the amounts of food eaten by people of the same class at different times and in different hospitals, and the amounts eaten by women as compared with men.

ACCURACY OF THE RESULTS

In a number of instances duplicate studies were made with the same patients. The interval between the two was generally about a month. The dietary used at the time of the second study was practically identical with that at the first study, and there was little reason to suppose that there would be any marked change in the actual food consumption during this time. If, therefore, the results obtained in the second or duplicate study agree reasonably closely with those of the first study then there is every reason to believe that the results are trustworthy. At the same time exact agreement is not to be expected, since minor factors, such as the general health of the aggregate population, the character of the weather, etc., might influence the food consumption.

Table G summarizes the results of duplicate studies with short intervals. The whole number of studies thus compared is 18 with patients and 2 with employees, a total of 20 studies with 10 different groups of patients and employees. The differences between the first study and its duplicate are with one exception relatively small. Sometimes the first study showed the greater consumption of food, sometimes the second; and sometimes the duplicate study showed a larger consumption of one class of nutrients and smaller of another as compared with the first study. The one noticeable exception to the general agreement

is found in the pair of studies with the employees at the infirmary group at the St. Lawrence Hospital. To what this difference in food consumption is due it is difficult to say. It may be that warmer weather in April led the employees to eat less than during the colder weather of March.

When, however, we come to consider all the studies, and especially the more important ones with the patients, the agreement between the first and second trials is almost complete. In other words, the duplicate studies are mutually confirmatory, and lead to the belief that the figures for amounts of nutrients and energy in the food eaten per person per day are not far from correct.

TABLE G

Comparison of amounts of nutrients and energy in food eaten by persons of the same classes in the same season of the year, i. e., with an interval of about one month

Number of study		Number of persons	NUTRIENTS			Energy
			Protein	Fat	Carbo-hydrates	
			Grams	Grams	Grams	Calories
PATIENTS, CHRONIC						
<i>Infirm, males</i>						
3	Long Island, Brooklyn Department, December, '98.....	49	68	58	345	2,232
7	Long Island, Brooklyn Department, January, '99.....	45	61	62	332	2,188
	Difference .....	.....	7	—4	13	44
11	St. Lawrence, Infirmary Group, March, '99.....	86	59	54	307	2,003
27	St. Lawrence, Infirmary Group, April, '99.....	87	63	54	321	2,077
	Difference .....	.....	—4	0	—14	—74
41	Willard, January, '99	288	73	68	398	2,564
45	Willard, March, '99.....	280	76	71	368	2,482
	Difference .....	.....	—3	—3	30	82

Infirm, females

4	Long Island, Brooklyn Department, December, '98.....	50	47	44	255	1,647
8	Long Island, Brooklyn Department, January, '99.....	50	41	43	237	1,540
	Difference . . . . .	.....	6	1	18	107
12	St. Lawrence, Infirmary Group, March, '99	99	46	43	218	1,482
18	St. Lawrence, Infirmary Group, April, '99.....	99	51	48	237	1,627
	Difference . . . . .	.....	—5	—5	—19	—145
<i>Workers, males</i>						
1	Long Island, Brooklyn Department, December, '98.....	96	84	88	342	2,565
5	Long Island, Brooklyn Department, January, '99.....	96	70	82	332	2,411
	Difference . . . . .	.....	14	6	10	154
10	St. Lawrence, Infirmary Group, March, '99.....	60	102	88	382	2,803
26	St. Lawrence, Infirmary Group, April, '99.....	60	101	87	380	2,781
	Difference . . . . .	.....	1	1	2	22
42	Willard, January, '99.....	284	92	93	457	3,117
46	Willard, March, '99.....	278	108	89	438	3,067
	Difference . . . . .	.....	—16	4	19	50

TABLE G—Comparison of amounts of nutrients, etc.—(Concluded)

Number of study		Number of persons	NUTRIENTS			Energy
			Protein	Fat	Carbo-hydrates	
			Grams	Grams	Grams	Calories
<i>Workers, females</i>						
2	Long Island, Brooklyn Department, December, '98.....	113	54	64	219	1,714
6	Long Island, Brooklyn Department, January, '99.....	117	48	66	217	1,700
	Difference .....	.....	6	—2	2	14
<i>Employees</i>						
9	St. Lawrence, Infirmary Group, March, '99	40	93	140	364	3,176
25	St. Lawrence, Infirmary Group, April, '99.....	39	80	121	315	2,745
	Difference .....	.....	13	19	49	431
<i>Average of patients</i>						
	Average of Nos. 3, 11, 41, 4, 12, 1, 10, 42, 2. 1st studies....	1,125	69	67	325	2,239
	Average of Nos. 7, 27, 45, 8, 18, 5, 26, 46, 6. 2d studies....	1,112	69	67	318	2,210
	Difference .....	.....	0	0	7	29
<i>Average of patients and employees</i>						
	Average of Nos. 3, 11, 41, 4, 12, 1, 10, 42, 2 and 9. 1st studies.	1,165	72	74	329	2,332
	Average of Nos. 7, 27, 45, 8, 18, 5, 26, 46, 6 and 25. 2d studies.	1,151	70	72	318	2,260
	Difference .....	.....	2	2	11	72

EFFECT OF SEASON UPON FOOD CONSUMPTION

Just how much difference there is in the food consumption of a given person or class of persons at different seasons of the year is a matter regarding which the available data are insufficient to warrant very definite conclusions. Seventeen of the dietary studies made at the State hospitals during the winter season, January to March, were repeated the following July. Inasmuch as the results obtained in the studies which were repeated with intervals of only a few weeks agreed very closely it seems fair to infer that any marked differences in the food consumption at different seasons of the year are due in part if not entirely to the influence of the season itself. It would be difficult to say in advance exactly what differences the season would make upon the food consumption of the population of the hospitals for the insane. On the one hand it might be supposed that, like people in general the insane would be inclined to eat somewhat less in the warm weather of summer than in the colder season of early winter and spring. On the other hand, the amount of physical exercise of non-workers as well as of workers is generally larger in summer than in winter because there are more opportunities for out-of-door work and exercise. Taking all in all, it would seem probable that the majority of the patients would eat less in the summer than in the winter but that some classes, more especially the working patients, would eat fully as much, or in some cases more, in summer than in winter. Such was actually found to be the case.

Table H summarizes the results of the 34 studies which were made at different seasons of the year; 17 in winter and early spring and 17 in July. It will be noticed that the general tendency appears to be toward a somewhat smaller food consumption in summer than in winter. The differences in some cases appear to be very marked indeed. Thus in No. 17 "recent admissions" males, and Nos. 22 and 35, "acute and sick chronic" females, all in St. Lawrence Hospital, the March dietaries exceeded those of July by 27 grams of protein and about 650 calories of energy in two instances. Other studies show a

slightly greater food consumption in the summer than in the winter. These cases are largely among the infirm and the restless, active, disturbed patients, who were perhaps less affected by changes of season than were the majority of the patients. In the comparison of seven studies of dietaries of male patients of different classes in February and March with a like number of studies with practically the same patients in July shows practically the same amount of protein at both times but 235 calories, or about 9 per cent. less of energy in the daily food eaten in July. In a corresponding number of dietary studies of female patients the protein was less by 7 grams or about 9 per cent. and the energy less by 157 calories or about 8 per cent. in summer than in late winter. Averaging together all studies with both patients and employees the daily food consumption in summer was smaller than that in winter by 4 grams or 6 per cent. of protein and 188 calories, or 8 per cent. of energy.

These differences are sufficient to indicate that normally there is among the hospital population a slightly smaller consumption of food in the summer than in the winter.

TABLE H

Comparison of amounts of nutrients and energy eaten by persons of the same classes in different seasons, i. e., summer and winter

Number of study.	Number of persons	NUTRIENTS			Energy
		Protein	Fat	Carbo-hydrates	
		Grams	Grams	Grams	Calories
PATIENTS, CHRONIC					
<i>Infirm, males</i>					
49	110	70	54	307	2,048
54	124	83	77	277	2,193
	.....	—13	—23	30	—145
<i>Infirm, females</i>					
50	150	62	51	240	1,712
55	183	62	62	219	1,729
	.....	.....	—11	21	—17
<i>Light workers and disturbed, males</i>					
20	166	75	61	357	2,338
33	152	71	69	333	2,298
	.....	4	—8	24	40

TABLE II—Comparison of amounts of nutrients and energy eaten by persons, etc.—(Continued)

Number of study		Number of persons	NUTRIENTS			Energy
			Protein	Fat	Carbo- hydrates	
			Grams	Grams	Grams	Calories
<i>Light workers and disturbed, females</i>						
24	St. Lawrence, Central Group, March, '99	148	49	56	204	1,558
37	St. Lawrence, Central Group, July, '99	155	46	54	224	1,609
	Difference	.....	3	2	—20	—51
<i>Light workers, females</i>						
48	Long Island, Kings Park Department, February, 1900	520	64	44	268	1,770
53	Long Island, Kings Park Department, July, 1900	587	64	58	276	1,933
	Difference	.....	0	—14	—8	—163
<i>Restless, active, disturbed males</i>						
14	St. Lawrence, Group III, March, '99	129	92	98	419	3,006
39	St. Lawrence, Group III, July, '99	129	96	64	363	2,485
	Difference	.....	—4	34	56	521
<i>Restless, active, disturbed females</i>						
15	St. Lawrence, Group III, March, '99	224	59	66	313	2,139
40	St. Lawrence, Group III, July, '99	224	53	51	259	1,753
	Difference	.....	6	15	54	386

23	St. Lawrence, Central Group, March, '99	86	63	58	260	1,864
36	St. Lawrence, Central Group, July, '99	87	59	63	282	1,984
	Difference.....	.....	4	—5	—22	—120
	Average of Nos. 15 and 23, March, '99	310	60	64	298	2,063
	Average of Nos. 40 and 36, July, '99	311	55	54	265	1,814
	Difference.....	.....	5	10	33	249
	<i>Workers, males</i>					
19	St. Lawrence, Central Group, March, '99	104	108	92	445	3,123
32	St. Lawrence, Central Group, July, '99	108	129	83	460	3,187
	Difference.....	.....	—21	9	—15	—64
47	Long Island, Kings Park Department, February, 1900	215	118	126	410	3,336
52	Long Island, Kings Park Department, July, 1900	294	115	83	396	2,868
	Difference.....	.....	3	43	14	468
	Average of Nos. 19 and 47, February and March, 1900 .....	.....	113	109	428	3,232
	Average of Nos. 32 and 52, July, 1900 .....	.....	122	83	428	3,027
	Difference .....	.....	—9	26	0	205

Acute and sick chronic, females

22	St. Lawrence, Central Group, March, '99.....	18	62	90	285	2,260
35	St. Lawrence, Central Group, July, '99.....	21	35	59	221	1,598
	Difference		27	31	64	662
EMPLOYEES						
13	St. Lawrence, Group III, March, '99.....	61	72	107	295	2,500
38	St. Lawrence, Group III, July, '99	63	55	92	245	2,085
	Difference.....		17	15	50	415
16	St. Lawrence, Central Group, March, '99	138	76	113	346	2,781
29	St. Lawrence, Central Group, July, '99.....	138	77	127	296	2,710
	Difference		—1	—14	50	71
51	Long Island, Kings Park Department, February, 1900	111	107	171	435	3,814
56	Long Island, Kings Park Department, July, 1900	104	122	175	408	3,801
	Difference		—15	—4	27	13
	Average of Nos. 13, 16 and 51, February and March, '99		85	130	359	3,029
	Average of Nos. 38, 29 and 56, July, '99.....		85	131	316	2,866
	Difference.....		0	—1	43	163

TABLE H—Comparison of amounts of nutrients and energy eaten by persons, etc.—(Concluded)

Number of study	Number of persons	NUTRIENTS			Energy
		Protein	Fat	Carbo-hydrates	
		Grams	Grams	Grams	Calories
<i>Averages of patients, males</i>					
Average of Nos. 49, 20, 14, 19, 47, 17 and 18, 7 studies, February and March	88	87	388	2,761
Average of Nos. 54, 33, 39, 32, 52, 30 and 31, 7 studies, July	87	75	359	2,526
Difference.....	1	12	29	235
<i>Averages of patients, females</i>					
Average of Nos. 50, 24, 15, 48, 23, 21 and 22, 7 studies, February and March.....	58	61	252	1,838
Average of Nos. 55, 37, 53, 40, 36, 34 and 35, 7 studies, July	49	56	234	1,681
Difference.....	9	5	18	157
<i>Averages of patients, both sexes</i>					
Average of Nos. 49, 50, 20, 24, 48, 14, 15, 23, 19, 47, 17, 21, 18 and 22, 14 studies, February and March	73	74	320	2,299
Average of Nos. 54, 55, 33, 37, 53, 39, 40, 36, 32, 52, 30, 34, 31 and 35, 14 studies, July.....	68	66	296	2,106
Difference.....	5	8	24	193

<i>Averages of patients and employees</i>					
Average of Nos. 49, 50, 20, 24, 48, 14, 15, 23, 19, 47, 17, 21, 18, 22, 13, 16 and 51, 17 studies, February and March	75	84	327	2,429	
Average of Nos. 54, 55, 33, 37, 53, 39, 40, 36, 32, 52, 30, 34, 31, 35, 38, 29 and 56, 17 studies, July	71	77	300	2,241	
Difference.....	4	7	27	188	

FOOD CONSUMPTION OF MEN AS COMPARED WITH WOMEN OF
HOSPITAL POPULATION

From a rather limited number of comparisons of the food consumption of healthy males and females of different classes in different parts of the United States, it has been inferred that a woman eats, on the average, not far from .8 as much as a man under relatively similar conditions of activity. This makes the ratio of food eaten by women to that eaten by men as 8 to 10. The figures obtained in the investigations at the hospitals for the insane enable us to compare the food consumption of the female population with that of the male population. This is done in the following table.

The figures for the chronic patients may be considered as fairly representative of their actual food consumption. Whether the same can be said for the acute cases is less uncertain. This uncertainty is due not only to the changing character of this class of the hospital population and the variations in their appetite from time to time, but more especially to the fact that individuals of this class are in many cases very irregular in their food consumption and that a considerable number of those studied were receiving special diets, and thus had unknown amounts of nutrients and energy in addition to those shown by the dietary studies. While it is not probable that the amounts thus obtained would be sufficient to increase the figures very largely, it does render them more or less uncertain.

Considering, then, the figures for the food consumption of the chronic female patients as compared with the chronic male patients it will be observed that the women ate on the average about .7 as much as the men. In other words, the difference in food consumption of the men and women was larger and the amount eaten by the women as compared with the men was smaller than under ordinary conditions of health, according to the best data at hand. Just why there should be this difference in the ratios of food consumption of the two sexes in the hospitals and the ratios in ordinary life it is impossible to say.

It may be that the ratio of 8 to 10 for women and men in health is not quite correct, but a very natural assumption is that the women in the hospitals have in general less physical exercise, as compared with the men, than is common with the two sexes under normal conditions. The opportunities for providing work for women in the hospitals are much less favorable than for men, so that among the so-called workers the relative activity of the men would be much greater than that of the women. That this may, in part at least, account for the differences is suggested by the fact that the ratio of food consumption of women to that of men among the infirm was approximately as 7.6 to 10 both as regards protein and energy, while among workers, light workers, and restless, active, disturbed patients it was as 6 to 10 for protein and 6.5 to 10 for energy. In other words, the difference between the sexes in muscular activity seems to be larger among the working population than among the infirm, and thus to correspond in a degree to the difference in food consumption.

TABLE I
Food consumption of men and women patients compared

Refer- ence No.	CLASSES OF PATIENTS.—HOSPITALS	PROTEIN			ENERGY		
		Men per day	Women per day	Men to women as 10 to	Men per day	Women per day	Men to women as 10 to
		Grams	Grams		Calories	Calories	
A	Infirm, Long Island, Brooklyn Department.....	65	44	6.8	2,214	1,598	7.2
B	Infirm, St. Lawrence.....	61	49	8.0	2,040	1,563	7.7
C	Infirm, Willard.....	74	56	7.6	2,523	1,807	7.2
D	Infirm, Long Island, Kings Park Department.....	76	62	8.2	2,121	1,721	8.1
	Average A-D.....	69	53	7.7	2,225	1,672	7.5
E	Workers, Long Island, Brooklyn Department.....	77	51	6.6	2,488	1,707	6.9
F	Workers, Willard.....	100	51	5.1	3,089	1,804	5.8
	Average of E and F.....	89	51	5.7	2,789	1,756	6.3
G	Light workers and disturbed, St. Lawrence.....	73	48	6.6	2,318	1,586	6.8
H	Restless and active disturbed, St. Lawrence.....	95	58	6.1	2,746	1,926	7.0
I	Acute, recent admissions, St. Lawrence.....	65	35	5.4	2,555	1,363	5.3
J	Acute and sick chronic, St. Lawrence.....	66	48	7.3	2,507	1,905	7.6
	Average A-J.....	75	50	6.7	2,460	1,698	6.9

A. Men, average of studies Nos. 3 and 7; women, average of Nos. 4 and 8.
 B. Men, average of studies Nos. 11 and 27; women, average of Nos. 12 and 28.
 C. Men, average of studies Nos. 41 and 45; women, study No. 44.
 D. Men, average of studies Nos. 49 and 54; women, average of Nos. 50 and 55.
 E. Men, average of studies Nos. 1 and 5; women, average of Nos. 2 and 6.
 F. Men, average of studies Nos. 42 and 46; women, study No. 43.
 G. Men, average of studies Nos. 20 and 23; women, average of Nos. 24 and 27.
 H. Men, average of studies Nos. 14 and 39; women, average of Nos. 15, 23, 40 and 36.
 I. Men, average of studies Nos. 17 and 30; women, average of Nos. 21 and 34.
 J. Men, average of studies Nos. 18 and 31; women, average of Nos. 22 and 35.

AMOUNTS OF FOOD EATEN BY DIFFERENT CLASSES OF HOSPITAL
POPULATION

Table J beyond summarizes the average food consumption of different classes of patients in the different hospitals. It will be observed that there are some noticeable differences in the average food consumption of similar classes of patients at the different hospitals. It is to be remembered, however, that the groups of patients which are here placed in the same class are not at all times strictly comparable, since in the different hospitals the patients are grouped together in wards and buildings in different ways so that it is not always practicable to make dietary studies of exactly the same class of persons. For this reason apparent differences in the food consumption of patients, here taken as belonging to the same class, in different hospitals may be due not so much to actual differences in the food consumption of patients having similar physiological demands as to slight differences in classification, which make the studies only approximately comparable. Thus among the infirm males at both the Brooklyn Department of the Long Island and the St. Lawrence hospitals the quantities of protein consumed were nearly the same, as were also the quantities of energy. On the other hand, in the studies at the Kings Park Department of the Long Island hospital the quantity of protein was larger, and in those at Willard the quantities of both protein and energy were larger than among the similar classes at the hospitals first named.

It has already been explained that the figures for the acute patients, and especially for the females, rather understate the quantities of food actually eaten, since they do not include the nutrients and energy furnished by the special dishes which were served, in greater or less amount, to this class of patients. It seems fair to assume, however, that the figures of the table represent approximately the average food consumption of different classes of patients among the average hospital population of the state.

TABLE J

Average of nutrients and energy in food actually eaten by different classes of the population of Long Island (Brooklyn and Kings Park: Departments), St. Lawrence and Willard State Hospitals

[Quantities per person per day, unless otherwise stated]

Serial num- bers of dietary studies included in averages	STATE HOSPITALS AND CLASSES OF PERSONS	Number of studies	Number of persons	RESULTS ON BASIS OF TOTAL NUTRIENTS				RESULTS ON BASIS OF AVAILABLE NUTRIENTS			
				Protein	Fat	Carbo- hydrates	Energy	Protein	Fat	Carbo- hydrates	Energy
				Grams	Grams	Grams	Calories	Grams	Grams	Grams	Calories
PATIENTS, CHRONIC											
<i>Infirm, males</i>											
3, 7	Long Island, Brooklyn Dep't	2	47	65	60	339	2,214	60	57	329	2,150
11, 27	St. Lawrence...	2	87	61	54	314	2,040	56	51	305	1,981
41, 45	Willard	2	284	74	69	383	2,516	68	66	371	2,442
49, 54	Long Island, Kings Park Dep't	2	117	76	66	292	2,123	70	63	283	2,059
	Average 8 studies.....	.....	.....	69	63	332	2,230	64	60	322	2,165
<i>Infirm, females</i>											
4, 8	Long Island, Brooklyn Dep't	2	50	44	44	246	1,598	40	42	239	1,552
12, 28	St. Lawrence.....	2	99	49	46	228	1,563	45	44	221	1,517
44	Willard	1	275	56	55	260	1,807	52	52	252	1,754
50, 55	Long Island, Kings Park Dep't	2	167	62	56	229	1,714	57	53	222	1,662
	Average 7 studies.....	.....	.....	52	49	238	1,645	48	47	221	1,596
<i>Light workers and disturbed, males</i>											
20, 33	St. Lawrence.....	2	159	73	65	345	2,318	67	62	325	2,251

<i>Light workers and disturbed, females</i>										
24, 37	2	152	48	55	214	1,586	44	52	208	1,538
48, 53										
	2	554	64	51	272	1,852	52	48	264	1,798
	.....	.....	56	53	243	1,719	52	50	236	1,668
<i>Restless, active, disturbed, males</i>										
14, 39	2	129	95	81	391	2,746	87	77	379	2,665
	4	310	58	59	278	1,926	53	56	270	1,869
15, 40, 23, 36										
<i>Workers, males</i>										
1, 5	2	96	77	85	337	2,488	71	81	327	2,413
10, 26, 19, 32	4	166	110	88	417	2,978	101	84	404	2,891
42, 46	2	281	100	91	447	3,089	92	86	434	2,998
47, 52										
	2	255	116	105	403	3,104	107	100	391	3,011
	.....	.....	103	91	404	2,925	95	86	392	2,838
<i>Workers, females</i>										
2, 6	2	115	51	65	218	1,707	47	62	211	1,655
43	1	271	51	63	246	1,804	47	60	239	1,749
	.....	.....	51	65	227	1,744	47	62	220	1,691
<i>PATIENTS, ACUTE</i>										
<i>Recent admissions, males</i>										
17, 30	2	35	65	86	363	2,555	60	82	352	2,477

TABLE J.—Nutrients and energy in food actually eaten, etc.—(Continued)

Serial num- bers of dietary studies included in averages	STATE HOSPITALS AND CLASSES OF PERSONS	Number of studies	Number of persons	RESULTS ON BASIS OF TOTAL NUTRIENTS				RESULTS ON BASIS OF AVAILABLE NUTRIENTS*			
				Protein	Fat	Carbo- hydrates	Energy	Protein	Fat	Carbo- hydrates	Energy
				Grams	Grams	Grams	Calories	Grams	Grams	Grams	Calories
21, 34	<i>Recent admissions, females</i> St. Lawrence.....	2	50	35	54	175	1,363	32	51	170	1,321
	<i>Acute and sick chronic,</i> <i>males</i>										
18, 31	St. Lawrence.....	2	18	66	80	364	2,507	61	76	353	2,432
	<i>Acute and sick chronic,</i> <i>females</i>										
22, 35	St. Lawrence.....	2	20	48	73	251	1,905	44	69	243	1,816
	EMPLOYEES										
9, 25, 13, 38 {	St. Lawrence, per person....	6	240	74	117	311	2,667	68	111	302	2,581
16, 29 {	St. Lawrence, est'd, per man.	.....	.....	85	132	352	3,019	78	125	341	2,923

* See explanation on page 55

ESTIMATES OF AVERAGE FOOD CONSUMPTION OF TOTAL HOSPITAL
POPULATION

It was not practicable, in the studies carried on at either department of the Long Island State Hospital or at the Willard State Hospital, to include estimates of the food consumption of the population as a whole. At the St. Lawrence State Hospital, however, the dietaries of 1,463 persons, patients and employees, were studied, out of a total population of about 1,750 persons. Included in this number were representatives of almost every class, and an average of the food consumption of the different classes may be used for estimating the amounts consumed by the different classes of patients and employees not included in the dietary studies. Taking into account the average food consumption of different classes of the population, and the number of persons in each class, an estimate may be made of the total food required by the hospital population as a whole for one day, from which the average ration consumed by the total population may be computed. The details of this computation were given in the Eleventh Annual Report of the State Commission in Lunacy (pp. 240-243) and need not be repeated here. It will suffice to say that the average ration (total nutrients and energy per person per day in food eaten) for the total population was thus found to be 73 grams of protein, 76 grams of fat, 317 grams of carbohydrates and 2,306 calories of energy per person per day. These results we may take as representing approximately the average amount of nutrients for the population of the St. Lawrence State Hospital in 1899.

Whether the eating habits of the population of the St. Lawrence hospital fairly represent the whole hospital system of New York it is impossible to say without actual observation. It is worthy of note, however, that the results of studies carried on in three other hospitals agree quite closely with those of corresponding studies in the St. Lawrence hospital, thus suggesting that there is no very great difference in the food consumption of the same class of patients in different hospitals. On the other hand, it is to be remembered that these figures are

based upon a comparatively small number of dietary studies and that the relative number of different classes of patients in different hospitals, and their different demands for nourishment, may vary. To obtain exact information regarding the average ration consumed by the different hospitals would require a very considerable amount of labor, but I am persuaded that a much more extensive inquiry than has thus far been made in this direction is very desirable. Meanwhile it is probable that we shall not be very far out of the way in assuming that the actual food consumption in the St. Lawrence Hospital, as estimated from the figures above cited, represent approximately the average for that institution and are not very far from representing the average for the whole population of the hospitals for the insane in the State. This conclusion is confirmed by the agreement of the results of dietary studies Nos. 41-56 here reported with those of studies 1-40 reported previously.

FOOD CONSUMPTION *vs.* PHYSIOLOGICAL DEMAND

It is often assumed that the appetite may be taken as a measure of the quantity of food that should properly be eaten. If this is true in some cases it certainly is not true in all. With most people the amount eaten is influenced largely by the taste of the food and the habits of the eater. Physicians and hygienists are very generally of the opinion that a large proportion of the well-to-do people in this country eat more than is necessary, and this opinion is certainly borne out by statistics of food consumption. But even assuming that people of sound mind have such good judgment and self control and freedom from bad habits of eating that their appetites and inclinations will adjust their diet to the actual demands of their bodies irrespective of the amount and taste of the food they find in the market and on their tables, we could hardly assume that people whose judgment, acquired habits and self control are as unreliable in other respects as is the case with many of the insane, could be depended upon to make the wisest choice in so delicate and difficult a matter as the adjustment of nutriment to physio-

logical needs. My own limited observation has led me to think that large numbers of the insane are inclined to eat thoughtlessly. As a matter of fact, they seem to me to eat whatever is set before them, asking no questions and taking no thought as to whether or not it is more than they need, so long as hunger is satisfied and no physical discomfort is felt.

Man, like other animals, can dispose of much more food than is needed for his sustenance. The less is his understanding of his physical needs the more ready is he to eat unwisely. I think the question may be safely asked whether the administering of foods to some classes of insane people is not very much like the feeding of animals. If this be so, it would be only natural to expect that so long as the food is supplied to them they will eat a great deal more than is really needed. Of course account must be taken of the patients who are disinclined to eat and may be underfed unless they have special care. And it may be that many patients would give no indications of dissatisfaction if less food were supplied them than they actually need.

The matter may be put in another way. Excessive eating is injurious to health. The same is true of insufficient nourishment. People of sound mind guard themselves more or less against the evils of excess or deficiency, though many fail to do so and suffer in consequence. A considerable part of the population of the hospitals for the insane cannot be expected to exercise any such good judgment. If they are fed without regard to their needs the natural result in many cases would be excess. Such feeding is uneconomical from the standpoint of hospital administration, if not injurious to the patient himself. It may be that others eat too little, though our observations lead me to think that the amount of food supplied to patients could hardly be deficient in any of the New York hospitals for the insane.

PHYSIOLOGICAL STANDARD

This brings us to the consideration of the question, What are the physiological demands of the different classes of the

insane? Our present knowledge of the actual needs of insane hospital patients of different classes is insufficient. We have tolerably well established physiological standards for persons in health of different age, sex and occupation, but considerable accurate observation and experiment will be needed to establish reliable and satisfactory standards for people in abnormal mental and physical conditions.

With the insane, as with others, it is important to distinguish between different classes and learn the needs of each class. One important part of the investigation here reported was to find out the quantities of food actually eaten by patients of different classes, and different sex. The results have been summarized in the preceding tables.

In lack of exact information as to the actual needs the best that can be done is to make as accurate estimates as possible. As data for these we may use:

1. Dietary standards for persons in health, taking into account the facts upon which the standards are based and what is known of the relation between age, sex, size, and especially occupation, physical and mental on the one hand, and the demands for nourishment on the other.

2. What can be found concerning the probable demands of different classes of the insane, as compared with those of persons in health.

Dietary standards for persons in health.—Taking into account the results of a very considerable amount of research concerning the actual food consumption of persons of different age, sex and occupation, and under different conditions of environment, and the results of a large number of metabolism experiments, including especially those with the respiration apparatus* in Germany and those with the respiration calorimeter† in this country, it is possible to deduce certain values which appear to represent more or less closely the needs of persons under different conditions. These dietary standards, however, are at

* For a description of the respiration apparatus, see Summary of Results by Pettenkofer and Voit, Ranke, and others in U. S. Dept. Agr., Office of Experiment Stations, Bul. 45, p. 265.

† See report of experiments by W. O. Atwater and associates in U. S. Dept. Agr., Office of Experiment Stations, Bcls. 44, 69 and 109.

present based upon insufficient data, and a great deal of painstaking research will be necessary before any hard and fast rules can be laid down concerning the quantity of nutrients and energy best suited to average persons of different age, sex and occupation. The standards proposed by the writer for adults, under ordinary conditions of health and environment are as follows:

TABLE K
Dietary standards for adults in health

	OLD BASIS*		NEW BASIS*	
	Total protein	Fuel value	Available protein	Fuel value
	Grams	Calories	Grams	Calories
Man with moderately active muscular work.....	125	3,500	115	3,400
Man with light to moderate muscular work.....	112	2,150	103	3,050
Man with sedentary work.....	100	2,800	92	2,700
Woman with moderately active work	100	2,800	92	2,700
Man with very little exercise.....	90	2,500	83	2,450
Woman with light to moderate work	90	2,500	83	2,450
Woman with very little exercise....	80	2,250	73	2,200

* See page 55

Dietary standards for the insane.—The results of the dietary studies carried on in the different hospitals serve to indicate how much nutrients and energy the patients of different classes are ordinarily obtaining in the food actually eaten. The concordance of results for similar groups of patients in different hospitals is sufficient to show that their actual food habits are not greatly different.

Taking into account the total population of the St. Lawrence Hospital, and assuming that the officers and employees not included in the studies ate about as much as the average persons in health under similar conditions of muscular activity, it was found that the average daily per capita food consumption was 73 grams of protein, 76 of fat, 317 of carbohydrates, with a fuel

value of 2,305 calories of energy. Whether these values represent the actual needs of the population and would thus serve as a physiological standard for the per capita food consumption in the hospitals for the insane is a question that cannot be definitely answered without a large amount of further research. It would seem, however, that they ought not to be very far from representing such a standard. At the same time it is not certain but that the patients would have been better nourished with more food; and on the other hand they might have been equally well nourished with less food. Basing our inferences upon what appear to be the food requirements of persons in health and upon the actual food consumption in the hospitals for the insane it would seem that the average hospital population would be amply nourished with a diet furnishing 80 grams of protein and 2,400 calories of energy per day, and very likely 75 grams of protein and 2,300 calories of energy would suffice for healthful nourishment. It is, however, better to err on the safe side, and to feed too much rather than too little; and for general practice it might be better to consider the physiological demands as requiring 85 grams of total protein and 2,500 calories of energy. The 85 grams of total would correspond to 78 grams of available protein and the fuel value as computed by the new factors (see p. 53) would be 2,425 instead of 2,500 calories.

PHYSIOLOGICAL STANDARDS VERSUS RATION ALLOWANCE

It is very important to distinguish between the physiological standard which is intended to meet the actual demand for nourishment and the hospital standard or ration allowance, which must provide not only enough food for nourishment but also an additional amount as margin to cover the shrinkage and waste.

MARGIN ALLOWANCE FOR FOOD NOT EATEN. WASTE

The estimates just given refer, it must be remembered, to the food actually eaten. The food actually supplied must be considerably increased so as to cover the waste and shrinkage which, to some extent, must inevitably occur. Even in the best

regulated households, not all of the food purchased is actually eaten. A certain amount of waste is inevitable; that is to say, more or less of the edible portion of the food is necessarily lost in the cooking and serving. According to my experience, the loss in this latter way is generally larger in boarding houses than in small families. Whether it need be larger in public than in private establishments, I do not know. It is certainly large in some of the New York hospitals.

To myself it has been a matter of surprise to see in how many ways the wastes may occur, and how much effort would be needed to prevent them. Nevertheless, I believe that it will prove possible to reduce them very much. The first thing that is needed is to have the attention of the people in charge called to the subject. The next step will be to observe just where the leaks are and how they may best be stopped. These leaks occur in the storeroom, the kitchen and dining room. Those in the storeroom are of less importance, but they could, at times, be obviated, especially if better storage facilities could be furnished in some instances. Those in the kitchen appear to be the largest. In the preparation of vegetables for cooking, a good deal of the edible portion is removed, as for instance in paring potatoes and turnips. Oftentimes, considerable portions of food are left adhering to the pans in which they are baked or to the pots in which they are boiled. When the food is served at the table, the portions are not always fitted to the tastes and the eating habits of the individual persons before whom they are placed. Sometimes the portions left on the dishes from which the food is served and which are carried back to the kitchen are not worked up into palatable dishes and served again as they might be. In many such ways as this, wastes occur and the aggregate is much larger than one would naturally think. This is simply in accordance with the general fact that unless we are extremely careful in the management of our resources, we fail to utilize the whole and the loss is likely to be much greater than we realize until we have found exactly how much it amounts to.

Just how large is the proportion of what is technically called waste in these establishments, the figures in this report do not exactly show. The amounts of table waste were determined in a number of cases, as shown by the figures above cited. The amounts of kitchen waste are less easily found. Their determination in households or small boarding houses is a comparatively simple matter, but in such establishments as the hospitals, the labor required for exact weighings of the wastes and the determination of the amounts of nutrients they contain would have demanded larger resources than were at our disposal.

In nearly 200 dietary studies made in the United States in connection with the food investigations which are being carried on by the United States Department of Agriculture, under my immediate supervision, the amount of waste has ranged from practically none to 8 or 10 per cent. of the whole food in private families; while in boarding houses, even when economy was sought, it has reached 10 and, in individual instances, nearly 20 per cent.

While it is not possible to give the exact figures for shrinkage and waste at the hospitals a general estimate of the amount can be reached in the following way: The actual quantities of raw food material issued to the various hospitals and raised on the hospital grounds was ascertained for the year ending September 30, 1898, and the quantities of nutrients and energy per person per day were calculated.* The computations were for total rather than available nutrients, and the energy was calculated by the use of the old factors. From these figures it appears that the actual ration of food per person per day contained, on the average, 113 grams of protein, 137 of fat and 427 of carbohydrates with 3,490 calories of energy. On the other hand the quantities of nutrients and energy in the food estimated as actually consumed at the St. Lawrence Hospital were 73 grams of protein, 76 of fat, 317 of carbohydrates and 2,305 calories of energy.

* See page 116 of the first of these reports, i. e. page 116 of the 10th annual report of the New York State Commission in Lunacy.

If we estimate that the average amounts of food eaten in the hospitals in the year 1897-8 were the same as were actually found to be eaten in the St. Lawrence Hospital for the succeeding year, 1898-9, the conclusion is that only a little over two-thirds of the total food purchased in 1897-8 was actually eaten by the hospital population and that nearly one-third, in so far as it was utilized at all, served only as food for swine.

Viewed from the pecuniary standpoint, this is an important matter. The annual cost of the food supplied to the New York State hospitals at the present rate is about \$1,125,000. One-third of this would be about \$375,000 a year. Even if more accurate observations should show that this estimate of the amount of food not eaten is an exaggeration, the actual figures must certainly be very large. One-fourth of the whole would be about \$280,000.

To one who has not looked into the matter, these figures for "waste" are surprising. I have come to believe, however, that the existence of even so large a difference between food supplied and food eaten as the above figures imply is quite in the natural order of things. In the ordinary household it is comparatively easy to regulate the food supply so that it shall not be materially in excess of the amounts actually eaten. The eating habits of the family are known to the housewife. In economical households the food is selected and cooked in such ways as to meet the individual tastes and needs of the members of the family, and the kitchen wastes are not large. The economical handling of food in large establishments, like hospitals for the insane, is a more difficult matter than in ordinary families and boarding houses. The number of people in the kitchen is smaller in proportion to the number of people to be fed. Many of the employees lack training; many are, in fact, patients, and they have not the incitement to economy that the housewife feels nor have they her convenience for enforcing it. The leaks are more numerous and harder to stop and the aggregate amount of loss much greater than one can well realize until he has seen the statistics. No one is especially to blame that

losses occur. To avoid all waste of food is impracticable. The best that can be done is to reduce the waste to a minimum.

AMOUNTS OF FOODS SUPPLIED TO NEW YORK STATE HOSPITALS FOR
THE INSANE AND POSSIBLE REDUCTION. RATION ALLOWANCE

For the hospital allowance enough nutrients and energy must be added to the physiological standard to make up for the loss by shrinkage and waste. The actual margin which must be thus allowed is a question of hospital management and makes it difficult to lay down any hospital standard.

The per capita ration allowance during 1897-1898 is estimated to have been equivalent to 127 grams of protein and 3,700 calories of energy per day. The actual food purchased during this same year according to the figures furnished by the stewards of the different hospitals supplied 113 grams of protein and 3,500 calories of energy. In 1900 the hospital allowance was reduced 15 per cent. in meats, fish and farinaceous foods and 25 per cent. in butter. It is estimated that the reduced ration furnished 110 grams of protein and 3,400 calories of energy per person per day. According to the statistics for the food consumption at St. Lawrence hospital in 1899-1900 the average daily food consumption in the whole hospital amounted to 73 grams of protein and 2,300 calories of energy per person. The difference between the amounts actually eaten and the average amounts supplied during the previous year give some idea of the margin allowance required at that time for shrinkage, waste, etc. The proposed physiological dietary standard of 85 grams of protein and 2,500 calories of energy is considerably in excess of the actual food consumption and, as above stated, seems to me larger than is needed. This dietary standard calls for about 16 per cent. more protein and 9 per cent. more energy than was found in the actual food consumption. These facts are brought out more prominently in the following table. It will be observed that the figures here are for "total" as distinguished from "available" nutrients.

TABLE L

Nutrients and energy per person per day in old and new ration allowances, food actually consumed and physiological standard

	ON BASIS OF TOTAL NUTRIENTS			
	Protein	Fat	Carbo. hydrates	Fuel value
	Grams	Grams	Grams	Calories
Ration allowance, 1897-8	127	138	460	3,690
Actual purchases, 1897-8 (per stewards figures)	113	137	427	3,490
Ration allowance, 1900	110	126	435	3,405
Food actually eaten, 1899-1900	73	76	317	2,305
Proposed dietary standard (physiological)	85	*	*	2,500

* Sufficient fats and carbohydrates to furnish, together with the protein the desired fuel value.

If instead of the total nutrients we consider the so-called digestible, i. e., available nutrients and the energy as estimated on the revised basis as explained on page 52, omitting the figures for carbohydrates and fats, we have the following:

TABLE M

Available protein and energy per person per day in old and new ration allowances, food actually consumed and physiological standard

	ON BASIS OF AVAILABLE NUTRIENTS AND NEW FACTORS FOR FUEL VALUE	
	Protein	Fuel value
	Grams	Calories
Ration allowance, 1897-8	117	3,575
Actual purchases, 1897-8	104	3,380
Ration allowance, 1900	101	3,300
Food actually eaten, 1899-1900	67	2,235
Proposed dietary standard (physiological)....	78	2,425

As compared with the proposed physiological standard the protein and energy in the present hospital ration allows a margin of about 25 per cent. In other words, if one-fourth of the

nutrients and energy in the food actually purchased were lost by shrinkage, waste or otherwise, the food actually eaten would furnish approximately the quantities of nutrients and energy in the proposed dietary standards.

The following table brings out more clearly the relation between the ration allowance, proposed dietary standards and present food consumption, and shows the necessary ration allowance with different margin percentages. The basal amounts, i. e., the actual amounts of nutrients and energy in food consumed with no allowance for margin are 85 grams of protein and 2,500 calories of energy in the dietary standard, and 73 grams of protein and 2,300 calories of energy in the actual food consumption. If the ration allowance is based upon these figures with different percentages of margin the results given in the table are obtained. It will be observed that the present ration allowance gives a margin of practically 25 per cent. as based upon the proposed dietary standards and of about 33 per cent. as based upon the actual food consumption.

TABLE N

Ration allowances per person per day, based upon proposed standard and upon actual consumption with different margins for shrinkage, waste, etc.

	DIETARY STANDARD AS BASIS—MARGINS ADDED		PRESENT FOOD CON- SUMPTION AS BASIS— MARGINS ADDED	
	Protein	Fuel value	Protein	Fuel value
	Grams	Calories	Grams	Calories
Basal amount, no margin.....	85	2,500	73	2,300
Ration allowance on basis of 15% margin	100	2,950	86	2,700
Ration allowance on basis of 20% margin	106	3,125	91	2,875
Ration allowance on basis of 25% margin	113	3,350	97	3,050
Ration allowance on basis of 30% margin	121	3,575	104	3,300
Ration allowance, 1900-1.....	110	3,400	110	3,400

A certain amount of margin, just how much I cannot say, is necessary. The margin necessary under the conditions now existing can, in my opinion, be reduced by improved methods of storage and handling of food and of kitchen and dining room management. Just what margin the actual hospital ration allowance shall assume to be necessary is a question of hospital administration and not of physiological chemistry. In view of this fact I do not presume to set up a standard for the hospital allowance.

GROUPING OF FOOD MATERIALS BY PROPORTIONS OF NUTRIENTS

NUTRITIVE EQUIVALENTS

In making estimates for a hospital dietary a certain liberty in the selection of the food materials is very desirable. The object is to obtain a diet which shall supply the quantities of actual nutrients which are needed by the hospital population. If the food estimates be made for a given period, as a month, it is desirable to use such kinds of food as may be most conveniently and economically obtained during that period. Potatoes are a staple food material, but at one time they may be abundant and cheap, while at another time they are scarce and dear. The same is true of carrots, turnips, beets and other like vegetable foods. It may at times be desirable, therefore, to substitute one of these kinds of vegetables for another, as the supply or cost may require. Corn meal and rice occupy important places in the list, but it is often an advantage to be able to use them in the place of wheat, or substitute one of them for another, or to replace them by rye or barley or buckwheat or other cereal foods. In like manner potatoes and cereal products may often be interchanged with great advantage. Beef, likewise, is in constant use, but it will be advantageous to know how much mutton or veal may be used in the place of a given amount of average beef. The meats and other animal foods are expensive, that is to say, the nutriment in them costs much more than in flour or corn meal or other vegetable foods at

ordinary prices. Sometimes unnecessarily large quantities of the animal foods are used, and it is often possible to substitute for them the cheaper vegetable foods without detriment; indeed, this may be done at times with advantage to health. But the leaner meats and fish are richer in protein, and we can hardly use wheat flour or corn meal in their place, because the latter have less protein, that is to say, the leaner meats and fish have narrower, and the flour or meal wider nutritive ratios. But we can employ beans or peas or skim milk, which have larger proportions of protein, with the wheat flour or the corn meal, and thus make mixtures which chemical analysis, physiological experiment and common experience unite in showing to be equal in nutritive value to the diet with more meat, while they are far less costly. To make these substitutions, and at the same time maintain the proper balance of tissue forming and fuel ingredients of the total diet, requires a somewhat accurate knowledge of the composition of the food materials and proportions which may be used to replace one another.

In making such substitution it is desirable to change the nutritive value as little as practicable. That is to say, the nutritive value of the substitute should be nearly the same as that of the material which it replaces. Assuming both the original material and the substitute to be ordinary, staple food materials and equally healthful, the nutritive values will be decided by the kinds and amounts of digestible or "available" nutrients. What is wanted, then, is to see practically that both have the same or nearly the same amount of available protein and energy. The total amounts of available nutrients and the nutritive ratios should correspond. Of course it is neither practicable nor necessary to make them correspond exactly but it is desirable that the amounts of available protein and energy and the nutritive ratios should be not too far apart.

In accordance with the desire of the Commission in Lunacy I have attempted, with the assistance of Mr. A. P. Bryant and other gentlemen, to prepare a series of tables which will show the comparative amounts of different food materials which may

be used interchangeably without materially altering the nutritive value of the diet.

In preparing these tables we have been much perplexed by the fact that different food materials differ so greatly in their relative proportions of protein and energy, that is to say their nutritive ratios vary so widely. This makes it difficult to arrange such comprehensive and satisfactory groups of nutritive equivalents as might be desired.

An attempt was made in my first report to the Commission* to show how a certain flexibility in the ration might be attained. To this end I suggested the grouping of a number of common food materials in such way as to indicate what quantity of any member of a given group should be used in place of 100 pounds of any other member of the group in order to maintain nutritive equilibrium, i. e., keep the quantities of protein and of energy nearly unchanged. The comparisons and the tentative groupings were based upon the total nutrients ordinarily present in the different food materials and took no account of differences in digestibility.

In the present report a further attempt is made to prepare tables of nutritive equivalents which may indicate ways in which variety can be obtained in the diet; materials which are scarce or dear may be replaced by other material of nearly the same nutritive value, and the diet thus suited to particular conditions, or at times even made cheaper by judicious selection of nutritive equivalents. In this grouping according to nutritive values only such food materials are included as are in common use at the different hospitals, as shown by the monthly food requisitions furnished me by the auditor of the Commission in Lunacy. Such foods as are used only in relatively small amounts are not taken into account. The figures in Table P are those for available rather than total protein and energy; they are based upon those given in the table on pages 57-61.

The following table shows the available protein and energy and the nutritive ratios of the food materials for which the equivalents were computed. In this table the materials

* See 10th annual report State Commission in Lunacy, p. 65.

have for convenience, been divided into 10 groups according to their nutritive ratios, beginning with those having the smallest or narrowest ratios. By nutritive ratio, as previously explained (p. 53), is meant the ratio of the available (digestible) protein to the available fuel ingredients of the food, i. e., the digestible fats and carbohydrates. Since the fats have a fuel value $2\frac{1}{4}$ times that of the carbohydrates it is customary to state the nutritive ratio as the ratio between the digestible protein and the digestible carbohydrates plus two and a quarter times the digestible fat.

The grouping of the materials is as follows:

Group A.—Materials with nutritive ratio less than .5.

Group B.—Materials with nutritive ratio between .5 and 1.0.

Group C.—Materials with nutritive ratio between 1.1 and 2.0.

Group D.—Materials with nutritive ratio between 2.1 and 3.0.

Group E.—Materials with nutritive ratio between 3.1 and 4.5.

Group F.—Materials with nutritive ratio between 4.6 and 6.5.

Group G.—Materials with nutritive ratio between 6.6 and 9.5.

Group H.—Materials with nutritive ratio between 9.6 and 13.0.

Group I.—Materials with nutritive ratio between 13.1 and 20.0.

Group K.—Materials with nutritive ratio above 20.0.

TABLE O

Available protein and energy, with nutritive ratio, in some common food materials

ARTICLES	Available protein	Available energy in one pound	Nutritive ratio
	Per ct	Calories	1 :
<i>Group A. Ratio less than .5</i>			
Fish, lean, fresh	10.8	225	0.1
Fish, lean, salt	15.5	325	0.1
<i>Group B. Ratio .5 to 1.0</i>			
Beef, liver	18.9	580	0.6
Beef, dried	25.6	795	0.6
Clams	10.3	340	0.7
Salmon, salt	18.9	685	0.8
Veal, sides	15.1	560	0.9
Oysters	5.8	225	1.0
<i>Group C. Ratio 1.1 to 2.0</i>			
Beef, canned, corned	25.5	1,275	1.6
Smoked halibut	18.7	945	1.6
Skimmed milk	3.3	170	1.8
<i>Group D. Ratio 2.1 to 3.0</i>			
Frankfort or bologna sausage	19.0	1,160	2.1
Beef, fore quarter	14.1	995	2.6
Beef, hind quarter	14.9	1,045	2.6
Beef, sides	14.4	1,030	2.7
Lamb, sides	13.7	1,040	2.9
Cheese	25.1	1,885	3.0
<i>Group E. Ratio 3.1 to 4.5</i>			
Beans or peas, dried	17.6	1,520	3.5
Mutton, sides	12.6	1,195	3.9
Milk, whole	3.2	310	4.2
Pork, smoked shoulder	12.6	1,340	4.3
<i>Group F. Ratio 4.6 to 6.5</i>			
Pork, smoked ham	13.8	1,640	5.0
Beef, corned	11.9	1,570	5.8
Oatmeal	13.4	1,805	6.0
<i>Group G. Ratio 6.6 to 9.5</i>			
Macaroni, spaghetti, etc.	10.4	1,650	7.3
Graham flour	10.3	1,645	7.3
Pork sausage	12.6	2,080	7.5
Bread	7.1	1,200	7.8
Wheat flour	9.7	1,645	7.8
Wheat, crushed, farina, etc	9.3	1,680	8.4

TABLE O—Available protein and energy—(Continued)

ARTICLES	Available protein	Available energy in one pound	Nutritive ratio
	Per ct	Calories	1:
<i>Group H. Ratio 9.6 to 13.0</i>			
Corn meal	7.5	1,640	10.4
Potatoes.....	1.3	295	11.1
Hominy or samp	6.8	1,635	11.6
Barley.....	6.6	1,640	11.7
Crackers.....	7.6	1,880	12.0
Rice	6.5	1,625	12.1
<i>Group I. Ratio 13.1 to 20.0</i>			
Pork sides.....	7.8	2,160	13.4
Rye flour.....	5.3	1,620	15.0
Bacon.....	8.8	2,720	15.1
Buckwheat flour.....	5.2	1,610	15.2
Sweet potatoes.....	1.1	440	20.0
<i>Group K. Ratio above 20.0</i>			
Fat salt pork	1.8	3,565	*
Butter	1.0	3,410	*
Tapioca	0.3	1,650	*
Sugar .....	.....	1,750	*
Corn starch.....	.....	1,675	*

* Proportion of protein too small for calculation of nutritive ratio. Material used for energy only.

It will be observed that the differences in nutritive ratios of the materials in the same group are small in the groups with narrow ratios and large in those with wider ratios. The reason for grouping the materials in this way is that those in the former groups are of special importance as sources of protein and hence comparatively small differences in nutritive ratio preclude their being substituted, one for the other, as of equivalent nutritive value, while as the foods increase in nutritive ratio they become relatively less valuable for their protein and more valuable as sources of energy, so that differences in the quantities of protein become of less importance.

Method of determining equivalent quantities.—Having grouped food materials according to their nutritive ratios it becomes necessary to determine how much of one material in a group

should be substituted for a given amount of some other material. For example, rice and potatoes are found in Group II. How many pounds of rice may be substituted for 100 pounds of potatoes in order to furnish the nutritive equivalentt, i. e., the same or nearly the same amounts as protein and energy? One hundred pounds of potatoes with 1.3 per cent protein and a fuel value of 295 calories per pound would furnish 13 pounds of protein and 29,500 calories of energy. One hundred pounds of rice, on the other hand, would furnish 6.5 pounds of protein and 162,500 calories of energy, so that much less than 100 pounds of rice would be required to replace 100 pounds of potatoes. In order to determine the actual amounts we find the quantity of rice which would supply 1.3 pounds of protein and the quantity which would supply 29,500 calories of energy. It would take $(1.3 \div .065 =)$ 20 pounds of rice to furnish the same protein as 100 pounds of potatoes and $(29,500 \div 1625 =)$ 18.2 pounds to furnish the same energy. Since the nutritive ratios differ, neither can make an exact substitute for the other, but we may substitute 18 pounds of rice for 100 pounds of potatoes and practically obtain the same quantities of protein and energy. We take 18 pounds rather than 19 pounds because the nitrogenous matter of potatoes is probably of less value than that of rice, so that the comparison should be made on the basis of energy. Similar computations serve to show how much barley would be equivalent to 100 pounds of corn meal. As far as the protein is concerned it would require $(7.5 \div .066 =)$ 114 pounds, but to supply the same energy would require only $(164,000 \div 1640 =)$ 100 pounds. In stating the nutritive equivalents the figures have been taken to the nearest 5 pounds for quantities below and the nearest 10 pounds for quantities above 100 pounds. Accordingly we might take either 100 or 110 pounds of barley as an approximate equivalent for 100 pounds of corn meal. The table gives 110 pounds of barley as the nutritive equivalent.

According to the figures only those food materials which are in a given group can be substituted one for the other without considerable change in the nutritive value of the diet, but in

practice it may be convenient to extend the group so as to include materials in the division immediately preceding or following. Thus, for example, potatoes (Group II) may be compared not only with corn meal, hominy, crackers, barley and rice, but, less closely with (Group G) macaroni, graham flour, bread, wheat flour, pork sausage and crushed wheat, all of which have considerably narrower nutritive ratios; and with (Group I) pork sides, rye flour, buckwheat, bacon and sweet potatoes, all of which have wider nutritive ratios.

The following tables show the quantities of different food materials which can be substituted for 100 pounds of any given material without greatly altering the nutritive value of the ration. In these substitutes are included not only those materials of the same group, which are strictly comparable, but those of the preceding and following groups which are less strictly comparable. The quantity of protein and energy in 100 pounds of the given material and in the equivalent amount of the substitute are shown. Where the protein in the substitute is larger than that in the material to be replaced the energy will be smaller and vice versa; where the total protein in the substitute is smaller than that in the material replaced the energy will be larger.

The classification is not to be taken as indicating that for any meal or any day, or even any week, one hundred pounds or more of any given material is to be replaced by the specified amount of some other material, but that in making out the monthly estimate a given material may be reduced in amount by using in its stead the equivalent in some other material. This, in some cases, would increase and in some cases diminish the expense. Thus the use of 70 pounds of bacon for 100 pounds of corn meal would increase the expense, while the use of 140 pounds of corn meal for 100 pounds of bacon would diminish the expense. There might, however, be times in which it is desirable for the sake of variety or for some other reason to use bacon in place of, or in combination with corn meal. In this case for 100

pounds of corn meal 70 pounds of bacon could be used, or for 25 pounds of corn meal $17\frac{1}{2}$ pounds of bacon.

One main point to be emphasized is that these substitutes are not always interchangeable in large amounts. Thus the patients might not relish a diet in which rice was substituted entirely for potatoes, but if, for an occasional meal, instead of 50 or 100 pounds of potatoes 19 or 18 pounds of rice were substituted, the diet might be made more varied or a scarcity in potatoes might be tided over without materially changing the nutritive value of the diet. The same thing is true of the use of beans or peas in the place of beef. The patients might not relish the substitution, on one day, of 75 pounds of beans for 100 pounds of beef, especially if this substitution were frequently made; but during the month the total quantity of beef consumed in the hospital might be reduced considerably by the use of 75 to 150 pounds more of beans in the place of 100 to 200 pounds of beef.

TABLE P

Quantities of different food materials approximately equivalent in nutritive value to 100 pounds of a given material, with amounts of available protein and energy

	Protein	Fuel value
	Pounds	Calories
FOR BACON, SEE PORK		
FOR BARLEY, 100 POUNDS	6.6	164,000
Substitute any of the following:		
70 lbs. Bacon	6.2	190,400
115 " Bread	8.2	138,000
110 " Buckwheat flour.....	5.7	177,100
95 " Cornmeal	7.1	155,800
85 " Crackers.....	6.5	159,800
80 " Graham flour.....	8.2	131,600
100 " Hominy	6.8	163,500
80 " Macaroni	8.3	131,200
65 " Pork sausage.....	8.2	135,200
80 " " sides	6.2	172,800
530 " Potatoes	6.9	156,400
100 " Rice	6.5	162,500
110 " Rye flour.....	5.8	178,200
400 " Sweet potatoes	4.4	176,000
85 " Wheat crushed, farina etc.....	7.9	142,800
85 " " flour	8.2	139,800
FOR BEEF, CORNED, 100 POUNDS.....	11.9	157,000
Substitute any of the following:		
85 lbs. Beans or peas, dried.....	15.0	129,200
150 " Bread	10.7	180,000
100 " Graham flour	10.3	164,500
90 " Ham	12.4	147,600
100 " Macaroni	10.4	165,000
440 " Milk, whole	14.1	136,400
110 " Mutton or lamb sides.....	13.9	131,400
90 " Oatmeal	12.1	162,500
80 " Pork sausage.....	10.1	166,400
100 " " shoulders.....	12.6	134,000
100 " Wheat crushed, farina etc.....	9.3	168,000
100 " " flour.....	9.7	164,500
FOR BEEF, CORNED, CANNED, 100 POUNDS....	25.5	127,500
Substitute any of the following:		
120 lbs. Beef, dried.....	30.7	95,400
150 " " forequarter.....	21.2	149,300
145 " " hindquarter.....	21.6	151,500
150 " " sides	21.6	154,500

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR BEEF, CORNED, CANNED, ETC.—(Continued)		
80 lbs. Cheese.....	20.1	150,800
300 " Clams.....	30.9	102,000
120 " Frankfort or bologna sausage.....	22.8	139,200
170 " Liver (beef).....	32.1	98,600
770 " Milk, skimmed.....	25.4	130,900
440 " Oysters.....	25.5	99,000
160 " Salmon.....	30.2	109,600
140 " Smoked halibut.....	26.2	132,300
190 " Veal, sides.....	28.7	106,400
FOR BEEF, DRIED, 100 POUNDS.....	25.6	79,500
Substitute any of the following:		
80 lbs. Beef, corned, canned.....	20.4	102,000
240 " Clams.....	24.7	81,600
280 " Fish, cod, fresh.....	30.2	63,000
200 " " " salt.....	31.0	65,000
110 " Halibut, smoked.....	20.6	104,000
140 " Liver (beef).....	26.5	81,200
590 " Milk, skimmed.....	19.5	100,300
400 " Oysters.....	23.2	90,000
130 " Salmon.....	24.6	89,000
160 " Veal, sides.....	24.2	89,600
FOR BEEF, FOREQUARTER, 100 POUNDS.....	14.1	99,500
Substitute any of the following:		
75 lbs. Beans or peas, dried.....	13.2	114,000
65 " Beef, corned, canned.....	16.6	82,900
95 " " hindquarter.....	14.2	99,300
100 " " sides.....	14.4	103,000
55 " Cheese.....	13.8	103,700
80 " Frankfort or bologna sausage.....	15.2	92,800
90 " Halibut, smoked.....	16.8	85,100
530 " Milk, skimmed.....	17.5	90,100
390 " " whole.....	12.5	120,900
95 " Mutton or lamb, sides.....	12.0	113,500
90 " Pork, shoulder.....	11.3	120,600
FOR BEEF, HINDQUARTER, 100 POUNDS....	14.9	104,500
Substitute any of the following:		
80 lbs. Beans or peas, dried.....	14.1	121,600
70 " Beef, corned, canned.....	17.9	89,300
105 " " forequarter.....	14.8	104,500
100 " " sides.....	14.4	103,000
55 " Cheese.....	13.8	103,700
95 " Fish, smoked halibut.....	17.8	89,800

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR BEEF, HINDQUARTER, ETC.—(Continued)		
535 lbs. Milk, skimmed	17.7	91,000
400 " " whole	12.8	124,000
105 " Mutton or lamb, sides	13.2	125,500
100 " Pork, shoulder	12.6	134,000
85 " Sausage, frankfort or bologna	15.0	93,600
FOR BEEF, LIVER, 100 POUNDS	18.9	58,000
Substitute any of the following:		
75 lbs. Beef, dried	19.2	59,600
60 " " corned, canned	15.3	76,500
180 " Clams	18.5	61,200
210 " Fish, cod, fresh	22.7	47,200
145 " " salt	22.5	47,100
80 " Halibut, smoked	15.0	75,600
440 " Milk, skimmed	14.5	74,800
290 " Oysters	16.8	65,300
90 " Salmon	17.0	61,600
110 " Veal, sides	16.6	61,600
FOR BEEF, SIDES, 100 POUNDS	14.4	103,000
Substitute any of the following:		
70 lbs. Beef, corned, canned	17.9	89,200
100 " " forequarter	14.1	99,500
95 " " hindquarter	14.2	99,300
75 " Beans or peas, dried	13.2	114,000
55 " Cheese	13.8	103,700
80 " Frankfort or bologna sausage	15.2	92,800
90 " Halibut, smoked	16.8	85,100
530 " Milk, skimmed	17.5	90,100
390 " " whole	12.5	120,900
100 " Mutton or lamb, sides	12.6	119,500
90 " Pork, shoulder	11.3	120,600
FOR BREAD, 100 POUNDS	7.1	120,000
Substitute any of the following:		
85 lbs. Barley	5.6	139,400
65 " Beef, corned	7.7	102,100
85 " Cornmeal	6.4	139,400
75 " Crackers	5.7	141,000
70 " Graham flour	7.2	115,200
60 " Ham	8.3	98,400
85 " Hominy	5.8	139,000
70 " Macaroni	7.3	115,500
60 " Oatmeal	8.0	108,300
55 " Pork, sausage	6.9	114,400
480 " Potatoes*	6.2	141,600

* In the spring when the potatoes are shrunken and rough so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR BREAD, 100 POUNDS—(Continued)		
90 lbs. Rice	5.9	146,300
75 " Wheat, crushed, farina, etc.	7.0	126,000
75 " " flour	7.3	123,400
FOR BEANS OR PEAS, DRIED, 100 POUNDS.	17.6	152,000
Substitute any of the following:		
120 lbs. Beef, corned.	14.3	188,400
130 " " forequarter	18.3	129,400
125 " " hindquarter	18.6	130,600
130 " " sides	18.7	133,900
70 " Cheese	17.6	131,900
110 " Frankfort or bologna sausage.	20.9	127,600
110 " Ham	15.2	180,400
500 " Milk, whole	16.0	155,000
130 " Mutton or lamb, sides	16.4	155,300
100 " Oatmeal	13.4	180,500
120 " Pork, shoulder	15.1	160,800
FOR BUTTER, 100 POUNDS.	1.0	341,000
Substitute any of the following:		
95 lbs. Pork, salt, fat.	1.7	338,700
200 " Starch . . . . .	...	335,000
190 " Sugar . . . . .	...	332,500
210 " Tapioca . . . . .	.6	346,500
FOR CHEESE, 100 POUNDS	25.1	188,500
Substitute any of the following:		
140 lbs. Beans or peas, dried	24.6	212,800
120 " Beef, corned, canned.	30.6	153,000
180 " " forequarter	25.4	179,100
175 " " hindquarter	26.1	182,900
180 " " sides	25.9	185,400
150 " Frankfort or bologna sausage.	28.5	174,000
170 " Halibut, smoked	31.8	160,700
940 " Milk, skimmed	31.0	159,800
710 " " whole	22.7	220,100
190 " Mutton or lamb, sides	23.9	227,000
170 " Pork, shoulder	21.4	227,800
FOR CLAMS, 100 POUNDS.	10.3	34,000
Substitute any of the following:		
35 lbs. Beef, corned, canned	8.9	44,600
40 " " dried	10.2	31,800
120 " Fish, Cod, fresh	13.0	27,000
80 " " " salt	12.4	26,000

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR CLAMS, 100 POUNDS—(Continued)		
55 lbs. Liver, beef	10.4	31,900
240 " Milk, skimmed	7.9	40,800
160 " Oysters	9.3	36,000
50 " Salmon	9.5	34,300
45 " Smoked Halibut	8.4	42,500
65 " Veal, sides	9.8	36,400
FOR CORNMEAL, 100 POUNDS.....	7.5	164,000
Substitute any of the following :		
70 lbs. Bacon	6.2	190,400
110 " Barley	7.3	180,400
120 " Bread	8.5	144,000
120 " Buckwheat	6.2	193,200
90 " Crackers	6.8	169,200
85 " Graham flour	8.8	139,800
110 " Hominy	7.5	179,800
85 " Macaroni	8.8	140,300
65 " Pork, sausage	8.2	135,200
85 " Pork, sides	6.6	183,600
555 " Potatoes*	7.2	163,700
110 " Rice	7.2	178,800
120 " Rye flour	6.4	194,000
400 " Sweet potatoes	4.4	176,000
85 " Wheat, crushed, farina, etc	7.9	142,800
85 " " flour	8.2	139,800
FOR CRACKERS, 100 POUNDS.....	7.6	188,000
Substitute any of the following :		
80 lbs. Bacon	7.0	217,600
120 " Barley	7.9	196,800
130 " Bread	9.2	156,000
130 " Buckwheat	6.8	209,300
110 " Cornmeal	8.3	180,400
95 " Graham flour	9.8	156,300
120 " Hominy	8.2	196,200
95 " Macaroni	9.9	156,800
75 " Pork, sausage	9.5	156,000
95 " " sides	7.4	205,200
620 " Potatoes*	8.1	182,900
120 " Rice	7.8	195,000
130 " Rye flour	6.9	210,600
500 " Sweet potatoes	5.5	220,000
95 " Wheat, crushed, farina, etc	8.8	159,600
95 " " flour	9.2	156,300

* In the spring when the potatoes are shrunken and rough so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR EGGS, 100 POUNDS.....	11.5	61,500
Substitute any of the following:		
45 lbs. Beef, corned, canned.....	11.5	57,400
60 " " dried.....	15.4	47,700
75 " " forequarter.....	10.6	74,600
70 " " hindquarter.....	10.4	73,100
85 " " liver.....	16.1	49,300
70 " " sides.....	10.1	72,100
40 " Cheese.....	10.0	75,400
145 " Clams.....	14.9	49,300
55 " Frankfort or bologna sausage.....	10.5	63,800
65 " Halibut, smoked.....	12.2	61,400
70 " Lamb, sides.....	9.6	72,800
355 " Milk, skimmed.....	11.7	60,400
240 " Oysters.....	13.9	54,000
75 " Salmon, salt.....	14.2	51,400
FOR FISH, COD, FRESH, 100 POUNDS.....	10.8	22,500
Substitute any of the following:		
35 lbs. Beef, dried.....	9.0	27,800
85 " Clams.....	8.8	28,900
70 " Fish, cod, salt.....	10.9	22,800
50 " Liver (beef).....	9.5	29,000
FOR FISH, COD, SALT, 100 POUNDS.....	15.5	32,500
Substitute any of the following:		
50 lbs. Beef, dried.....	12.8	39,800
120 " Clams.....	12.4	40,800
150 " Fish, cod, fresh.....	16.2	33,700
70 " Liver (beef).....	13.2	40,600
FOR FISH, HALIBUT, SMOKED, 100 POUNDS..	18.7	94,500
Substitute any of the following:		
75 lbs. Beef, corned, canned.....	19.1	95,600
95 " " dried.....	24.3	75,500
110 " " forequarter.....	15.5	109,400
105 " " hindquarter.....	15.6	109,700
110 " " sides.....	15.8	113,300
60 " Cheese.....	15.1	113,100
230 " Clams.....	23.7	78,200
90 " Frankfort or bologna sausage.....	17.1	104,400
130 " Liver (beef).....	24.6	75,400
560 " Milk, skimmed.....	18.5	95,200
370 " Oysters.....	21.5	83,200
120 " Salmon, salt.....	22.7	82,200
150 " Veal, sides.....	22.7	84,000

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR FISH, SALMON, SALT, 100 POUNDS . . .	18.9	68,500
Substitute any of the following:		
65 lbs. Beef, corned, canned	16.6	82,900
80 " " dried	20.5	63,600
190 " Clams	19.6	64,600
200 " Fish, cod, fresh	23.8	49,500
160 " " " salt	24.8	52,000
110 " Liver, beef	20.8	63,800
470 " Milk, skimmed	15.5	79,900
320 " Oysters	18.6	72,000
85 " Smoked halibut	15.9	80,300
125 " Veal, sides	18.9	70,000
FOR FLOUR, BUCKWHEAT, 100 POUNDS . . .	5.2	161,000
Substitute any of the following:		
60 lbs. Bacon	5.3	163,200
90 " Barley	5.9	147,600
85 " Cornmeal	6.4	139,400
80 " Crackers	6.1	150,400
90 " Hominy	6.1	147,200
70 " Pork, sides	5.5	151,200
480 " Potatoes*	6.2	141,600
90 " Rice	5.9	146,300
100 " Rye flour	5.3	162,000
370 " Sweet potatoes	4.1	162,800
FOR FLOUR, GRAHAM, 100 POUNDS	10.3	164,500
Substitute any of the following:		
130 lbs. Barley	8.6	213,200
95 " Beef, corned	11.3	149,200
140 " Bread	9.9	168,000
120 " Cornmeal	9.0	196,800
110 " Crackers	8.4	206,800
130 " Hominy	8.8	212,600
85 " Ham	11.7	139,400
100 " Macaroni	10.4	165,000
85 " Oatmeal	11.4	153,400
80 " Pork sausage	10.1	166,400
670 " Potatoes*	8.7	197,600
130 " Rice	8.5	211,300
100 " Wheat, crushed, farina, etc.	9.3	168,000
100 " " flour	9.7	164,500

* In the spring when the potatoes are shrunken and rough so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR FLOUR, RYE, 100 POUNDS.....	5.3	162,000
Substitute any of the following:		
60 lbs. Bacon	5.3	163,200
90 " Barley	5.9	147,600
100 " Buckwheat flour	5.2	161,000
80 " Cornmeal	6.0	131,200
75 " Crackers	5.7	141,000
85 " Hominy.....	5.8	139,000
70 " Pork, sides	5.5	151,200
480 " Potatoes*	6.2	141,600
90 " Rice	5.9	146,300
385 " Sweet potatoes.....	4.2	169,400
FOR FLOUR, WHEAT, 100 POUNDS.	9.7	164,500
Substitute any of the following:		
120 lbs. Barley	7.9	196,800
140 " Bread	10.0	168,000
90 " Beef, corned.....	10.7	141,300
120 " Cornmeal	9.0	196,800
100 " Crackers	7.6	188,000
95 " Graham flour	9.8	156,300
85 " Ham	11.7	139,400
120 " Hominy.....	8.2	196,200
95 " Macaroni.	9.9	156,800
80 " Oat meal.....	10.7	144,400
80 " Pork sausage	10.1	166,400
650 " Potatoes*	8.4	191,700
120 " Rice	7.8	195,000
100 " Wheat, crushed, farina, etc.....	9.3	168,000
FOR HAM, SEE PORK.		
FOR HOMINY OR SAMP, 100 POUNDS	6.8	163,500
Substitute any of the following:		
70 lbs. Bacon....	6.2	190,400
100 " Barley	6.6	164,000
115 " Bread	8.2	138,000
110 " Buckwheat flour	5.7	177,100
95 " Cornmeal	7.1	155,800
85 " Crackers	6.5	159,800
80 " Graham flour.....	8.2	131,600
80 " Macaroni	8.3	132,000
65 " Pork, sausage	8.2	135,200
80 " " sides	6.2	172,800

* In the spring when the potatoes are shrunken and rough so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR HOMINY OR SAMP—Substitute—(Continued):		
530 lbs. Potatoes*	6.9	156,300
100 " Rice	6.5	162,500
115 " Rye flour	6.1	186,300
400 " Sweet potatoes.....	4.4	176,000
85 " Wheat, crushed, farina, etc.....	7.9	142,800
85 " " flour	8.2	139,800
FOR LIVER, BEEF, 100 POUNDS	18.9	58,000
Substitute any of the following:		
60 lbs. Beef, corned, canned	15.3	76,500
75 " " dried	19.2	59,600
180 " Clams	18.5	61,200
210 " Fish, cod, fresh	22.7	47,200
140 " " " salt	21.7	45,500
80 " Halibut, smoked	15.0	75,600
440 " Milk, skimmed.....	14.5	74,800
290 " Oysters	16.8	65,200
95 " Salmon	18.0	65,100
110 " Veal, sides	16.6	61,600
FOR MACARONI, 100 POUNDS	10.4	165,000
Substitute any of the following:		
130 lbs. Barley.....	8.6	213,200
140 " Bread	9.9	168,000
95 " Beef, corned.....	11.3	149,200
120 " Corn meal	9.0	196,800
110 " Crackers	8.4	206,800
100 " Graham flour	10.3	164,500
85 " Ham	11.7	139,400
130 " Hominy.....	8.8	212,600
85 " Oatmeal	11.4	153,400
80 " Pork, sausage	10.1	166,400
670 " Potatoes*	8.7	197,600
130 " Rice	8.5	211,300
100 " Wheat, crushed, farina, etc.....	9.3	168,000
100 " " flour.....	9.7	164,500
FOR MILK, SKIMMED, 100 POUNDS.....	3.3	17,000
Substitute any of the following:		
13 lbs. Beef, corned, canned	3.3	16,600
17 " " dried	4.4	13,500
19 " " forequarter	2.7	18,900
20 " " hindquarter	3.0	20,900
19 " " side	2.7	19,600

* In the spring, when the potatoes are shrunk and rough, so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR MILK, SKIMMED—Substitute—(Continued):		
11 lbs. Cheese.....	2.8	20,700
40 " Clams.....	4.1	13,600
16 " Frankfort or bologna sausage.....	3.0	18,600
18 " Halibut, smoked.....	3.4	17,000
23 " Liver, beef.....	4.4	13,300
70 " Oysters.....	4.1	15,700
22 " Salmon.....	4.2	15,100
26 " Veal, side.....	3.9	14,600
FOR MILK, WHOLE, 100 POUNDS.....	3.2	31,000
Substitute any of the following:		
20 lbs. Beans or peas, dried.....	3.5	30,400
26 " Beef, forequarter.....	3.7	25,900
26 " " hindquarter.....	3.9	27,200
26 " " side.....	3.7	26,800
23 " " corned.....	2.7	36,100
14 " Cheese.....	3.5	26,400
21 " Frankfort or bologna sausage.....	4.0	22,400
21 " Ham.....	2.9	34,400
26 " Mutton or lamb, sides.....	3.3	31,100
20 " Oatmeal.....	2.7	36,100
24 " Pork, shoulder.....	3.0	32,200
FOR MUTTON OR LAMB SIDES, 100 POUNDS..	12.6	119,500
Substitute any of the following:		
75 lbs. Beans or peas, dried.....	13.2	114,000
90 " Beef, corned.....	10.7	141,300
100 " " forequarter.....	14.1	99,500
100 " " hindquarter.....	14.9	104,500
100 " " side.....	14.4	103,000
55 " Cheese.....	13.8	103,700
80 " Frankfort or bologna sausage.....	15.2	92,800
80 " Ham.....	11.0	131,200
390 " Milk, whole.....	12.5	120,900
80 " Oatmeal.....	10.7	144,400
90 " Pork, shoulder.....	11.3	120,600
FOR OATMEAL, 100 POUNDS.....	13.4	180,500
Substitute any of the following:		
100 lbs. Beans or peas, dried.....	17.6	152,000
110 " Beef, corned.....	13.1	172,700
170 " Bread.....	12.1	204,000
120 " Graham flour.....	12.4	197,400
100 " Ham.....	13.8	164,000
120 " Macaroni.....	12.5	198,000
500 " Milk, whole.....	16.0	155,000

TABLE P.—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR OATMEAL—Substitute—(<i>Continued</i>):		
130 lbs. Mutton or lamb side	16.4	154,700
95 " Pork, sausage	12.0	197,600
120 " " shoulder	15.1	160,800
120 " Wheat, crushed, farina, etc.	11.2	201,600
120 " " flour	11.6	197,400
FOR OYSTERS, 100 POUNDS	5.8	22,500
Substitute any of the following:		
21 lbs. Beef, corned, canned	5.4	26,800
25 " " dried	6.4	19,900
60 " Clams	6.2	20,400
70 " Fish, cod, fresh	7.6	15,800
50 " " salt	7.8	16,300
34 " Liver, beef	6.4	19,700
150 " Milk, skimmed	4.9	25,500
31 " Salmon	5.9	21,200
27 " Smoked halibut	5.0	25,500
39 " Veal, side	5.9	21,800
FOR PORK, BACON, 100 POUNDS	8.8	272,000
Substitute any of the following:		
150 lbs. Barley	9.9	246,000
160 " Buckwheat flour	8.3	257,600
140 " Cornmeal	10.5	229,600
120 " Crackers	9.1	225,600
150 " Hominy	10.2	245,300
120 " Pork, side	9.4	259,200
800 " Potatoes *	10.4	236,000
150 " Rice	9.8	243,800
170 " Rye, flour	9.0	275,400
625 " Sweet potatoes	6.9	275,000
FOR PORK, HAM (SMOKED), 100 POUNDS	13.8	164,000
Substitute any of the following:		
95 lbs. Beans or peas, dried	16.7	144,400
110 " Beef, corned	13.1	172,700
160 " Bread	11.4	192,000
120 " Graham flour	12.4	197,400
120 " Macaroni	12.5	198,000
480 " Milk, whole	15.4	148,800
120 " Mutton or lamb, sides	15.1	143,400
100 " Oatmeal	13.4	180,500
90 " Pork, sausage	11.3	187,200
115 " " shoulder	14.5	154,100
120 " Wheat, crushed, farina, etc.	11.2	201,600
120 " " flour	11.6	197,400

* In the spring, when the potatoes are shrunken and rough, so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR PORK, SALT, FAT, 100 POUNDS.....	1.8	356,500
Substitute any of the following:		
100 lbs. Butter	1.0	341,000
200 " Sugar .....	....	350,000
210 " Starch .....	....	351,800
210 " Tapioca.....	.6	346,500
FOR PORK, SHOULDER (SMOKED), 100 POUNDS.	12.6	134,000
Substitute any of the following:		
95 lbs. Beef, corned.....	11.3	148,900
110 " forequarter.....	15.5	109,500
105 " " hindquarter.....	15.6	109,700
110 " " side.....	15.8	113,300
85 " Beans or peas, dried.....	15.0	129,200
60 " Cheese.....	15.1	113,100
90 " Frankfort or bologna sausage.....	17.1	104,400
85 " Ham	11.7	139,400
420 " Milk, whole.....	13.4	130,200
110 " Mutton or lamb, sides.....	13.9	131,400
85 " Oatmeal	11.4	153,400
FOR PORK, SIDE, 100 POUNDS.....	7.8	216,000
Substitute any of the following:		
85 lbs. Bacon.....	7.5	231,200
130 " Barley	8.6	213,200
140 " Buckwheat flour.....	7.3	225,400
120 " Cornmeal	9.0	196,800
110 " Crackers	8.4	206,800
130 " Hominy.....	8.8	212,500
670 " Potatoes*.....	8.7	197,600
130 " Rice.....	8.5	211,300
140 " Rye flour.....	7.4	226,800
525 " Sweet potatoes.....	5.8	231,000
FOR POTATOES,* 100 POUNDS..	1.3	29,500
Substitute any of the following:		
11 lbs. Bacon.....	1.0	29,900
18 " Barley.....	1.2	29,500
23 " Bread.....	1.6	27,600
19 " Buckwheat flour.....	1.0	30,600
18 " Cornmeal.....	1.4	29,500
16 " Crackers	1.2	30,100
17 " Graham flour.....	1.8	28,000
18 " Hominy.....	1.2	29,400

*In the spring when the potatoes are shrunken and rough so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR POTATOES*—Substitute—(Continued):		
17 lbs. Macaroni	1.8	28,000
14 " Pork, sausage	1.8	29,100
13 " " side	1.0	28,100
18 " Rice	1.2	29,300
19 " Rye flour	1.0	30,800
70 " Sweet potatoes .....	.7	30,800
17 " Wheat, crushed, farina, etc	1.6	28,600
17 " " flour	1.6	28,000
FOR RICE, 100 POUNDS	6.5	162,500
Substitute any of the following:		
70 lbs. Bacon	6.2	190,400
100 " Barley	6.6	164,000
110 " Bread	7.8	132,000
110 " Buckwheat flour	5.7	177,100
95 " Cornmeal	7.1	155,800
85 " Crackers	6.5	159,800
80 " Graham flour	8.2	131,600
100 " Hominy	6.8	163,500
80 " Macaroni	8.3	132,000
65 " Pork, sausage	8.2	135,200
80 " " sides	6.2	172,800
530 " Potatoes*	6.9	156,300
110 " Rye flour	5.8	178,200
400 " Sweet potatoes	4.4	176,000
85 " Wheat, crushed, farina, etc	7.9	142,800
85 " " flour	8.2	139,800
FOR SAUSAGE, BOLOGNA OR FRANKFORT, 100 POUNDS	17.7	116,000
Substitute any of the following:		
95 lbs. Beans or peas dried	16.7	144,400
85 " Beef, corned, canned	21.7	108,400
130 " Beef, forequarter	18.3	129,400
115 " Beef, hindquarter	17.1	120,200
130 " Beef, sides	18.7	133,900
70 " Cheese	17.6	132,000
110 " Halibut, smoked	20.6	104,000
630 " Milk, skimmed	20.8	107,100
480 " Milk, whole	15.4	148,800
120 " Mutton or lamb, sides	15.1	143,400
110 " Pork, shoulder	13.9	147,400

* In the spring when the potatoes are shrunken and rough so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Continued)

	Protein	Fuel value
	Pounds	Calories
FOR SAUSAGE, PORK, 100 POUNDS.....	12.6	208,000
Substitute any of the following :		
160 lbs. Barley	10.6	262,400
120 " Beef, corned	14.3	188,400
180 " Bread.....	12.8	216,000
150 " Cornmeal	11.3	246,000
130 " Crackers	9.9	244,400
130 " Graham flour	13.4	213,800
110 " Ham.....	15.2	180,400
160 " Hominy	10.9	261,600
130 " Macaroni.....	13.5	214,500
105 " Oatmeal.....	14.1	189,500
830 " Potatoes*	10.8	244,900
150 " Rice.....	9.8	243,800
130 " Wheat, crushed, farina, etc	12.1	218,400
130 " Wheat flour	12.6	213,800
FOR SWEET POTATOES, 100 POUNDS	1.1	44,000
Substitute any of the following :		
16 lbs. Bacon.....	1.4	43,500
27 " Barley	1.8	44,300
27 " Buckwheat flour.....	1.4	43,500
27 " Cornmeal.....	2.0	44,300
23 " Crackers	1.7	43,200
27 " Hominy.....	1.8	44,100
20 " Pork, side	1.6	43,200
150 " Potatoes*	2.0	44,300
27 " Rice	1.8	43,900
27 " Rye flour.....	1.4	43,700
FOR STARCH, 100 POUNDS .....	....	175,000
Substitute any of the following :		
55 lbs. Butter .....	.6	187,500
50 " Pork, fat, salt .....	.9	178,300
100 " Sugar.....	....	175,000
110 " Tapioca.....	.3	181,500
FOR SUGAR, 100 POUNDS .....	....	175,000
Substitute any of the following :		
55 lbs. Butter .....	.6	187,500
50 " Pork, salt, fat .....	.9	178,300
110 " Starch .....	....	184,300
110 " Tapioca.....	.3	181,500

*In the spring when the potatoes are shrunken and rough so that the loss in peeling is large, add at least 10 per cent.

TABLE P—Quantities of different food materials, etc.—(Concluded)

	Protein	Fuel value
	Pounds	Calories
FOR TAPIOCA, 100 POUNDS .....	.3	165,000
Substitute any of the following:		
50 lbs. Butter .....	.5	171,000
45 " Pork, fat, salt .....	.8	160,400
100 " Starch .....	....	167,500
95 " Sugar. ....	....	166,300
FOR WHEAT, CRUSHED, FARINA, ETC., 100 POUNDS	9.3	168,000
Substitute any of the following:		
120 lbs. Barley ..	7.9	196,800
90 " Beef, corned	10.7	141,300
135 " Bread	9.6	162,000
115 " Cornmeal	8.6	188,600
105 " Crackers	8.0	197,400
95 " Graham flour	9.8	156,300
120 " Hominy	8.2	196,200
95 " Macaroni	9.9	156,800
80 " Oatmeal	10.7	144,400
85 " Pork, ham	11.7	129,400
650 " Potatoes*	8.5	191,800
120 " Rice	7.8	195,000
80 " Sausage, pork	10.1	166,400
100 " Wheat flour	9.7	164,500

* In the spring when the potatoes are shrunken and rough so that the loss in peeling is large, add at least 10 per cent.

RECIPES FOR COOKING AND SUGGESTIONS FOR IMPROVEMENT IN KITCHEN ADMINISTRATION

In addition to the inquiries and other work reported in the previous chapters, an enterprise was undertaken which looked toward the preparation of "made" dishes in greater variety, attractiveness and palatability, and at reduced cost, as well as for the reduction of kitchen and table wastes and other improvements in kitchen management.

This work has been done at the St. Lawrence Hospital. It was made possible by the wise and generous support of Dr. William Mabon, superintendent of the hospital, and has been under the immediate charge of Miss Maria Daniell, a lady who is not only familiar with physiological and economic values of food but has also had a large experience in cookery and practical dietetics. She was assisted by Miss M. E. Troy, who likewise has very superior skill in cooking and kitchen administration. The work was carried on during several months and with very gratifying results. It brought out very clearly the great usefulness of such practical application of science to the hospital dietetics and kitchen and dining room administration.

The following statement, taken from Miss Daniell's report, will serve to show what was the aim of the work and what has been done:

REPORT OF MISS MARIA DANIELL

Regarding the work done at the St. Lawrence State Hospital while I was employed in the interests of the investigation into the matter of food supply to the New York State Hospitals, I herewith submit a brief report. I began work for the Hospital November 4, 1899, and was joined on November 22, 1899, by my assistant and cook, Miss Margaret Troy. We both left the Hospital May 31, 1900. While at the Hospital, our work consisted chiefly in trying to devise and prove the worth of recipes which should furnish, from a food supply of narrow limitations, attractive, palatable and nutritious dishes in pleasing variety and at low cost.

Mrs. Mary Hinman Abel, in her essay on "Practical, Sanitary and Economical Cooking," speaking of food economics says it consists, "First, in furnishing a certain food principle in its cheap rather than its dear form; second, having bought foods wisely, in cooking them in such a manner as to bring out their full nutritive value; third, in learning how to use every scrap of food to advantage; and fourth, if we add to these the art of so flavoring and varying as to make simple materials relish,

we have covered the whole field of the household economist, so far as the food question is concerned."

In my work at the St. Lawrence State Hospital, I have assumed that the inmates of the institution, though public wards, are entitled to more than a subsistence diet. The limitations put upon their sources of enjoyment are necessarily so restrictive that we can safely believe that, to a large percentage of them, the pleasures of eating are paramount. I have sought, therefore, to institute only such economies as will not detract from these pleasures, remembering, however, that tastes can and should be educated. I have also wished to particularly keep in mind the effect of food on the health of the consumer and to recommend only such materials and such methods of preparation as will give digestible and healthful food.

In planning recipes and in arranging dietary schedules I have considered three classes of people: unemployed patients, working patients and employees. The general policy has been to give to the first class a diet of marked simplicity, attractive but of the lowest possible cost; to the second class the same as to the first with the addition of some substantial extra, usually in the form of a meat dish, and to the employees the same as to the working patients with the frequent addition of some attractive dessert.

Selection of food materials.—Although an economical selection of food materials should provide the needed food principles in their cheaper rather than dearer forms, the cost of preparation must be taken into account, so that the form of food material whose first cost is least, is, in the long run, not always the cheapest. We purchase food materials for two distinct purposes. First, we seek such as will themselves provide, to the people to be fed, nourishment in available form; next we look for those which, independently of their nutritive value, be that much, little, or none at all, will add to the palatability of other foods. There is a large and varied line of materials coming under the latter classification, including spices and sugars, milk and eggs, and fruits. We thus have staple food materials and accessory food materials which are used in the preparation of the staple foods.

Of the meat purchased, beef must constitute the major part. It is the most economical and the kind least likely to become tiresome. Pork is needed for some purposes, especially to give variety to the diet, but not in such large quantity. In season veal is usually economical and furnishes pleasing variety. For a similar reason it may be desirable to use mutton once a week. The regulation Friday dinner must contain fresh fish, but it would seem undesirable to use the fish more than for this one dinner each week. When high in price, the class which does not require much meat can be provided with a very good dinner without fish, by use of beans or split peas. Dried beef makes a valuable extra dish for the breakfast or supper of working patients and employees. Bacon may be similarly used but with less frequency as it is not so economical; it loses such a percentage of its fat, in cooking, as to make the cooked product excessively costly. Salt pork is needed to cook with beans and in some chowders, soups, etc. It is also very good and much more economical than bacon when served fried, alone or in batter. Suf-

ficient salt fish can be provided for two meals per week, breakfasts or suppers. Poultry does not form an economical source of nutrients, but is needed for the sick and is desirable for holiday dinners.

Eggs are sometimes, when cheap, to be regarded as an economical food, but are more often to be regarded as an accessory to make available some cheaper material, especially some cereal product. When their price is high their use can be limited to small numbers, as in puddings and foods of similar composite nature. However, it is never economy to dispense with them entirely in general cookery. In some dishes the best results cannot be obtained without the use of eggs.

Milk is both a staple and an accessory food material. Served with oatmeal or other cereal, it increases the consumption of the cereal and thereby lessens the use of some more costly food. With stale bread, rice or corn meal, it enters into attractive puddings, low in cost and of high nutritive value. Because of its value as an aid in the utilization of the cheaper cereal and other products, it would seem an economy to make the milk supply liberal, especially where it does not cost more than \$1.00 to \$1.25 per 100 pounds. We would seem safe in assuming that cereal and vegetable foods, with milk, are more healthful for the aged and feeble than meat, and they certainly cost less. Where obtainable at a low cost skim milk is valuable in cookery. Butter is more strictly an accessory food. The free use of gravies in the dinners makes the use of butter for these meals unnecessary.

Of cereal foods wheat flour is by all means the most important. From it we get bread at a cost, for materials, of barely two cents per pound, and each pound furnishing half as many grams of protein and more than half as many calories of energy as is probably needed by the average patient for one day. In any economically constructed dietary we must look to bread as one of the most important, if not the most important, factor, and the other components must be selected and arranged with a view to promoting the consumption of bread, not from dearth of other things but because of the palatability of bread when taken with them. Having selected a good brand of flour, it would seem wise, in so far as possible, to adhere to the purchase of this one brand, the average baker being able to get better results when familiar with his materials.

In nutritive value the oat preparations stand close to those of wheat. Rolled oats and oatmeal furnish a large percentage of protein in a palatable form. The use of oats for breakfast is a pleasant and healthful custom which is necessary to promote the interests of economy. Rolled oats or oatmeal should appear about six mornings per week, the other morning being given to rolled wheat or hominy, by way of variety. By care in the cooking and judgment in the serving, the consumption of oatmeal can be increased and thereby the use of more expensive materials lessened. Where milk can be purchased for three cents or less per quart it would seem advisable to use it with the breakfast cereal, two ounces being about enough for each person. Even where rolled oats are the type of oat product used, a little oatmeal should be bought, as from it various things can be made for which rolled oats are not adapted. Rolled, crushed or cracked wheat furnishes a pleasant variety when desired in place of the oats.

Corn products, as corn meal and hominy, cannot be regarded as interchangeable with the oat and wheat products. They have a different nutritive ratio, being low in protein and rich in carbohydrates. Corn meal mush with milk or syrup makes a palatable dish and is very cheap. Corn meal and hominy are useful both when cooked alone or when combined with other foods in puddings and other composite dishes, of which some are very attractive and also extremely low in cost. Farina, sago and tapioca are all useful in furnishing variety to the diet, as is also macaroni, but they should not be relied upon as staples.

The importance of the legumes, as beans and peas, is to be especially noted. They furnish at a very reasonable cost large amounts of protein. Pound for pound they furnish considerable more nutritive material than does beef, but in a less digestible and less easily prepared form. When properly cooked, they are attractive, palatable, nutritious and very cheap. It would not seem impossible to have beans appear in at least three meals each week, baked, as soup and as a warmed-up breakfast dish. Peas should be frequently used, say weekly, in the form of soup and also baked with pork like beans. They are interchangeable with lentils. These legumes are to be regarded as substitutes for the leaner meats.

Among vegetables we need not refer to the importance of potatoes. Beets, carrots, turnips, salsify and cabbage are needed to give variety and attractiveness to the dinners. More important than any of these last are onions. They help to give flavor and attractiveness to a large number of composite dishes and also have a definite place as a side dish. Their lack is more often to be deplored than their abuse. No amount of prepared flavorings will take the place of onions in soups, stews and similar composite preparations. Of the lighter garden truck we need say little. Lettuce, celery, spinach, etc., are useful for their attractiveness and as furnishing elements which add to the healthfulness of the diet rather than to its nutritive value.

Fruits promote health, and may be used to increase the consumption of some of the cheaper products, as bread. In their purchase the latter idea should be kept in mind. As an instance, we may say that bananas are pleasing to the palate and eagerly eaten by most people, but they are commonly eaten alone. On the other hand, apple sauce, berries or similar fruits tempt one to take bread with them, thus increasing the consumption of bread and lessening the demand for other materials. Of course it is not always feasible to select fruit with an idea to its value for increasing the consumption of more staple foods rather than for its intrinsic nutritive value; but this can frequently be done, especially with the dried fruits.

Sugar, spices, flavors and condiments must not be considered so much for their nutritive value as for their usefulness in making attractive, at a low cost, highly nutritious food materials of the cheaper sorts. Theoretically, but little spice and flavoring should be needed. With sufficient care cooking develops attractive flavor in the food, but practically such a state of cookery is not likely to obtain in a large institution, and prepared flavors must be used.

Kitchen force and equipment.—In large public institutions it is frequently, if not usually, necessary to prepare food for large numbers of people

with a small force of kitchen workers, most of whom are likely to be unskilled. The character of the work done must, in no small measure, be determined by this fact. Real economy is not gained by a saving in the cost of the raw material unless the methods of cookery are such as to require the smallest possible amount of work. In an institution we may find the proportion of kitchen employees to people to be fed ranging anywhere from say one to a hundred to one to three hundred. The size of a force allowed in a kitchen, which is but one of a number being conducted under similar management is likely to be influenced, if not determined, by the force found necessary in some one well equipped kitchen. It is clear that like numbers of kitchen help cannot do work of like quality unless all other conditions are similar.

The difficulty of obtaining skilled help for the wages which can be paid in an institution kitchen makes it almost inevitable that most of the force will be comparatively unskilled. There must, however, be a fairly well trained person at the head of each kitchen. If the other helpers are faithful, their lack of technical skill can be excused, as everything should be done by rule rather than by dependence on such an unknown quantity as personal judgment.

The equipment of a kitchen should provide a proper amount of oven space, either by a large range or by a range and a portable baker's oven. The latter plan seems the more desirable, as the baker's oven is rather better for beans and some meats than the ordinary range oven. Large, brick bake ovens are much to be desired, especially for bread, etc. However, most of the cookery of meats and beans needs to be done at a lower temperature than the baking of bread, so that two ovens would be more practicable and satisfactory, since bread, meat, etc., must frequently be baked at the same time. Iron steaming kettles seem preferable to those of copper. The tin linings of the latter quickly become corroded and the kettles are then probably a source of some little danger and of much discomfort, especially when used for cooking foods having an acid reaction. There should be a proper provision of pot roasters. Steam cookers should use direct steam and be provided with vent pipes. Cooks and helpers will never do their best work when handicapped by a steam-laden atmosphere through which they may at times have difficulty in seeing.

There is often a tendency to overlook the necessity of having a liberal supply of small utensils. Skillets, sauce-pans and kettles should be provided in liberal numbers. Frequently the saving of some small lot of left-over material is neglected because of the lack of a suitable dish in which to prepare it for further use. These small utensils, too, are needed in preparing food for the sick. For the latter purpose a small meat press should also be provided.

Each kitchen should have the means for accurately weighing and measuring all materials used. There should be a good platform scale capable of weighing as much as three or five hundred pounds, and two small dial scales whose maximum capacity need not exceed twenty-five pounds. The small scales should be of the dial rather than the balance type, as they are easier to use and sufficiently accurate. If kitchen helpers are to be required to weigh all the materials they use, they must be provided

with the means of doing this weighing in the shortest possible time. The dial spring scales answer the purpose. Measures of capacity should be provided, the smallest being graduated to ounces, the largest holding at least a gallon. All steamers, kettles, sauce-pans, etc., should be marked on the inside showing the capacity at various levels. In any given kitchen the quantities used are likely to be quite constant, and it may be well to observe this in marking kettles and steamers. With proper conveniences it is likely to be found that the careful weighing and measuring of materials used will in the long run economize time by giving more reliable results.

RECIPES AND DIRECTIONS FOR COOKING. LEAFLETS

One outcome of the kind of work carried out by Miss Daniell has been the preparation, by her, of a number of recipes and directions for cooking, some of which have already been printed in leaflet form for convenient use of hospital chefs and cooks.

Leaflets.—The purpose of these is indicated by the general title, "New York State Hospital Dietary Experiments." Their object is not simply to provide a series of rules to be followed like those of a cook book, but more especially to encourage ambitious chefs and cooks to examine carefully into the subject, to try the different recipes thoroughly and thoughtfully, to measure and weigh the quantities accurately, to note and report the results, and to devise and suggest improvements. It has been evident from the start that one of the most valuable features of an inquiry of this kind would be the stimulation of intelligent observation and inquiry in a practical way by the persons charged with the responsibility of the kitchen and dining room management. It is of little consequence whether a given recipe stands the test or not if the employees can but be encouraged to use their best intelligence and their best efforts to make the most palatable and nutritious dishes from the least expensive materials.

The above ideas underlie the following statement printed upon the back of each of the leaflets which have been published.

"The object of this series of leaflets of recipes for chefs is indicated in the title, 'Dietary Experiments'. The recipes are not considered as necessarily the best that can be devised.

Some will be found more, some less, practically useful. A recipe may be excellent in one place and unsatisfactory in another. 'The proof of the pudding is in the eating'. The proof of a recipe is the test in the kitchen and dining room. Chefs are, therefore, requested to test these, note their advantages and disadvantages and make suggestions for alteration and improvement. These notes and suggestions may be reported to the superintendent of the hospital for transmission to Prof. W. O. Atwater, care State Commission in Lunacy, Albany, N. Y."

"In testing these recipes, it is requested that particular attention be given to quantities, i. e., that weights and measures here indicated be followed as closely as possible. This applies not only to the more bulky materials, as meat, flour and the like, but also those used in smaller quantities, like pepper and salt. If other amounts are found by actual experiment to be better, the fact will be valuable for reporting with other suggestions."

"The quantities here given are in each case for 100 persons. The quantities actually used should have the same ratio to the actual number of persons. Thus, for 60 persons use three-fifths; or for 250 persons, two and one-half times the quantity of each material here given."

Twelve of these leaflets, Nos. 1-12, were printed and distributed among the hospitals. Some of the results of experience with them, and especially a number of modifications suggested by the practical test of use are given with reprints of the leaflets themselves beyond. To these 12 are added 29 others which were not so distributed but are now published for the first time. The original credit for all is due Miss Daniell.

Some of the recipes have been tested with considerable thoroughness by Miss E. R. Rushmore, at the King's Park Department of the Long Island Hospital, who has very kindly made numerous valuable suggestions which have for their object either the cheapening of the dish without detracting from its palatability and nutritive value, or the lessening of the amount of kitchen labor necessary for the preparation of the dish. This later consideration is one which is often of much importance

where the number of persons in the kitchen, other than patients, is relatively small. The suggested changes in the recipes, with reasons, are stated after the original recipe.

Especial thanks are likewise due to Miss M. J. Mitchell, formerly of Manhattan Hospital, for a number of most valuable suggestions regarding both this and other subjects. Indeed it is to be greatly regretted that circumstances have not made it practicable to utilize more fully the valuable information furnished by Misses Daniell, Rushmore and Mitchell.

Concerning the practical use of these recipes Miss Rushmore writes as follows: "The recipes and general suggestions are useful and valuable for state hospitals. Most of the dishes are very attractive and are received favorably by patients in this hospital. The chopped roast, brown bread, corn chowder, beef-steak flamand and Indian pudding, are particularly desirable. When unfavorable criticism has been made it is chiefly because it has been impossible to carry out the recipes exactly, owing to the limitations in the supply of cooks and food materials, to the time required, to the necessity of simplifying a recipe for use in large quantities or to relatively unskilled labor."

The leaflets were of two kinds, entitled "General Suggestions" and "Recipes".

"GENERAL SUGGESTIONS"

Under this title four leaflets have been issued giving general directions for cooking of meats and vegetables. They are as follows:

The cooking of fresh meat. Leaflet No. 1.

The making of gravies. Leaflet No. 2.

The boiling of meats. Leaflet No. 3.

The cooking of vegetables. Leaflet No. 4.

In order to illustrate the form in which these leaflets were issued the first one, on the cooking of fresh meats, is published without change. In the other leaflets part of the heading has been omitted. The statements quoted on pages 150-151 above were printed on the back of each leaflet.

STATE OF NEW YORK—STATE COMMISSION IN LUNACY

NEW YORK STATE HOSPITAL DIETARY EXPERIMENTS

LEAFLET NO. I

FOR CHEFS

GENERAL SUGGESTIONS

THE COOKING OF FRESH MEATS

Cleaning the meat.—Under ordinary circumstances wipe the meat with a damp cloth which has been wrung out of cold water. This is usually enough, but if more thorough cleansing is needed, wash it quickly, one piece at a time, under the cold water running from a faucet. If obliged to use a pan, the washing must be done as quickly as possible and only one piece at a time put into the water. If the meat has been freshly cut and trimmed it will not need washing; wiping will be sufficient. Fresh meat should not be allowed to stand in water before being cooked as it may lose some of its soluble albumen and its flavor.

In either roasting or boiling, it is desirable to preserve the juice of the meat. This is done by heating the outside quite hot at the very outset so that the albumin-like substances (albumin and myosin) may be coagulated and hardened and thus form a kind of crust or envelope through which the juices inside cannot easily escape. Even in the hottest oven, the temperature of the inside of the meat does not rise above that of ordinary boiling water, and in large pieces it does not even reach that point.

Roasting.—If the meat is to be roasted, it must be wiped as dry as possible, salted, peppered, floured and put into a dry roasting pan. Set into a hot oven until well seared so that the juices will not be drawn out. After the meat is well browned, some suet or beef dripping, with which to baste the meat during the rest of the time it is cooking, should be put in the pan. Less heat is now required. If the oven is extremely hot, some water may be put into the pan and used with the fat to baste the meat but the water should not be added until the meat has seared in the dry pan.

In roasting beef in large quantities, allow 12 minutes to the pound. If the meat has been first properly seared, it will cook in its own moisture and be tender and juicy. Rare beef should look pinkish and not purple.

Boiling.—Meat that is to be cooked in water, like ham, shoulder or mutton, should be put into actively boiling water and allowed to boil for about 10 minutes. Then the steam should be turned down and the water allowed to simmer, so that little bubbles can be seen around the edge of the kettle. The temperature should be kept at this point until the meat is cooked. The result will be a tender, juicy piece, instead of one that is coarse grained, stringy and tough. Putting the meat into the actively boiling water and allowing it to cook at a high temperature for ten minutes only, hardens the albumin and myosin on the outside and thus keeps the juices in. The meat softens and cooks, so to speak, in its own moisture, like the roast which has been seared in the hot oven.

LEAFLET NO. 2

FOR CHEFS GENERAL SUGGESTIONS

THE MAKING OF GRAVIES

When the flour is cooked in hot fat, the gravy is brought to a finish in less time than is possible when the flour is blended with cold water or stock and added, as it then requires at least half an hour to cook so that it will not taste raw and pasty. In the raw state, the starch in the flour is not as easily digested as when it is cooked.

In the hot water the temperature does not rise above that of boiling water (212° F.) while the hot fat is much hotter, reaching 400°. In this hot fat the starch is very quickly cooked—five minutes suffices. Then when the hot liquid, which may be either water, stock or milk, is added the particles of starch swell and break, and after a few minutes boiling the sauce will be found to be entirely free from raw taste. In cooking for individual persons with delicate stomachs, it may be better to follow the rule of blending the flour with the cold liquid and then letting the sauce cook an hour or more, but in preparing

ordinary meals for hospital needs, cooking the fat and flour together seems the more practical way.

A poorly made gravy is unacceptable, but a well made gravy is a very useful part of a hospital dietary.

Modifications.—Experience in one of the hospitals has led to the following comments and modification of the method given above: While in making relatively small amounts of gravy the method just given is very satisfactory, when gravy is to be made for large numbers, say 1000 persons, the mechanical difficulties are such as to render a satisfactory product less certain. The stirring of so large a mass of flour and water is more than one man can attend to, and the gravy is very likely to be lumpy. Gravy that is perfectly satisfactory is made by blending starch with a cold liquid and adding it to a hot liquid, and if sufficient time is allowed for subsequent heating the starch grains will be properly cooked and the total cost of preparation will be less than by the more rapid method which requires extra labor to ensure success.

It is frequently more economical and more satisfactory to use corn starch in the place of flour since it only requires half as much.

LEAFLET No. 3

FOR CHEFS

GENERAL SUGGESTIONS

THE BOILING OF MEATS, POULTRY AND FISH.

Fresh meat, like leg of mutton or fowls, for instance, may be put into boiling water and the water allowed to boil rapidly for about 10 minutes. Then the temperature should be lowered and the meat should be allowed to cook at the simmering point, when little bubbles appear around the edge of the kettle, until it is done. The same rule applies to all lightly salted or smoked meats. But meats that are heavily salted should be put into cold water and allowed to come to the boiling point slowly. Then they must only simmer or they will be course grained and stringy. Fresh fish should always be put into boiling water, then only simmer, as rapid boiling breaks the skin and separates the flesh and much is wasted. If it is put into cold water there

may be a loss of flavor and perhaps of nutritive material before the fish begins to cook.

LEAFLET No. 4

FOR CHEFS

GENERAL SUGGESTIONS

THE COOKING OF VEGETABLES.

The coarser vegetables should be put into salted, fast-boiling water, allowing one tablespoonful salt to two quarts water for everything but spinach. The cooking should be steady and the vegetables should be taken up the moment they are done, as leaving them in the water detracts from their flavor. When the water is very hard, a little baking soda may be added to soften it, but not more than one teaspoonful to four gallons of water.

A few of the more delicate vegetables are exceptions to this rule. While steady cooking is necessary, it should not be fast enough to break them. Green peas, asparagus and cauliflower belong to this class.

Time of cooking vegetables

Potatoes, squash, spinach and parsnips, 30 minutes.

New beets, carrots and onions, 30 to 45 minutes.

New cabbage, string beans and salsify, 45 to 60 minutes.

Winter vegetables, as beets, carrots, turnips and onions, one to two hours.

Winter cabbage, one hour.

Spinach to be cooked in as little water as possible and less salt used than with the other vegetables, say one-half as much to the given amount of water. Not more than two quarts of water to a bushel of spinach should be used.

Modifications.—Since the character of vegetables varies with their age and size, too much reliance must not be placed on time schedules. Under certain conditions vegetables may require more cooking and under other conditions less cooking than called for by schedule. The length of time must be considered, of course, as approximate rather than exact.

RECIPES

Eight recipes have already been published in the form of leaflets; a considerable number of others have been prepared but not published. All are given beyond. Some of the recipes here printed for the first time have been tried in different hospitals, but few suggestions have been received regarding them.

The purpose of these recipes, it must be borne in mind, is to indicate ways for adding variety and attractiveness to the diet without increasing the cost; or how dishes as palatable as those in ordinary use may be prepared at less cost. Experience will doubtless show many ways in which improvements can be introduced. As stated above the purpose of the recipes will be accomplished if they cause greater attention to be given to ways in which the diet can be improved in variety or quality, or lessened in cost.

The following is a list of the recipes here given. The first eight were published as leaflets Nos. 5 to 12 respectively:

Chopped roast.....	Recipe No. 1.
Gravy to serve with chopped roast.....	Recipe No. 2.
Bean soup.....	Recipe No. 3.
Indian pudding.....	Recipe No. 4.
Meat and potato hash.....	Recipe No. 5.
Boston brownbread.....	Recipe No. 6.
Beefsteak flamand	Recipe No. 7.
Corn chowder.....	Recipe No. 8.
Pot roast of beef with gravy.....	Recipe No. 9.
Beef stew.....	Recipe No. 10.
Brown fricasse of beef.....	Recipe No. 11.
Curry of mutton and beef.....	Recipe No. 12.
Mutton stew.....	Recipe No. 13.
Hashed meat.....	Recipe No. 14.
Salt pork and batter.....	Recipe No. 15.
Meat and hominy cakes.....	Recipe No. 16.
Codfish and hominy.....	Recipe No. 17.
Codfish cakes.....	Recipe No. 18.

Scotch broth.....	Recipe No. 19.
Split pea soup.....	Recipe No. 20.
Tomato soup.....	Recipe No. 21.
Boston baked beans.....	Recipe No. 22.
Corn cake.....	Recipe No. 23.
Indian cheese cakes.....	Recipe No. 24.
Cheese fondue.....	Recipe No. 25.
Potato and cheese with cream sauce....	Recipe No. 26.
Hominy pudding with caramel sauce....	Recipe No. 27.
Rice pudding.....	Recipe No. 28.
Corn pudding.....	Recipe No. 29.
Dutch apple cake.....	Recipe No. 30.
Bread pudding.....	Recipe No. 31.
Cocoanut pudding.....	Recipe No. 32.
Chocolate pudding.....	Recipe No. 33.
Spiced pudding.....	Recipe No. 34.
Prune sauce.....	Recipe No. 35.
Pie crust (of beef dripping).....	Recipe No. 36.
Salad dressing without eggs or oil.....	Recipe No. 37.

LEAFLET No. 5

FOR CHEFS

RECIPE No. 1

CHOPPED ROAST

Amounts for 100 persons

Chopped roast is a meat dish which is attractive and nutritious and in which the beef used is from the cheaper cuts, such as are ordinarily used in making corned beef.

Beef from neck, chuck or shoulder, 20 lbs.	Stock or water, $1\frac{1}{3}$ qts. Salt, $2\frac{2}{3}$ ozs.
Salt pork, fat and lean mixed, 4 lbs.	Flour, 3 ozs. Onions, 10 ozs.
Bread crumbs, $1\frac{2}{3}$ lbs.	Pepper, $\frac{1}{3}$ oz.

Have the raw meat carefully chopped, also the onions. Mix them, adding the bread crumbs, salt and pepper.

In the meantime, blend carefully the flour with a little of the stock or water. Having heated the rest of the stock or water,

mix the blended flour with it and cook five minutes, stirring carefully to prevent lumping of the flour.

Now mix the cooked gravy with the meat mixture and make into oblong loaves, each big enough for about 12 persons. Put these into slightly greased pans and cook slowly in a moderate oven for two and one-half hours. While baking, baste once in twenty minutes.

The oven in which the roast is baked must be slow. If cooked in a high temperature, the meat will be dry and tough.

When done the roast should be a nicely browned loaf, tender and moist on the inside. A gravy should be prepared to go with it. (See leaflet No. 6.) It can be served in dinners like the following: Chopped roast, potatoes and gravy, beets, bread.

Modifications.—In one hospital where the above was tried the following revised recipe was found desirable:

REVISED RECIPE FOR CHOPPED ROAST

Beef from neck, chuck or shoulder, 25 lbs.	Stock or water, $1\frac{1}{2}$ qts.
Salt pork, fat and lean mixed, 5 lbs.	Corn starch, 2 ozs.
Bread crumbs, 2 lbs.	Onions, 12 ozs.
	Salt, 3 ozs.
	Pepper, $\frac{1}{2}$ oz.

From the valuable suggestions which accompanied the recipe as thus revised the following statements and explanations are taken.

It was found necessary in this particular hospital* to increase slightly the amounts for working patients and employees, although the original quantities were found sufficient for the unemployed.

A great deal of time and labor is required for separating the lean meat from bones and fat, especially when chuck, neck, plate and brisket are used. This work may at times be done by the butcher, but the time of the butcher is frequently as valuable as that of the cook.

*In another hospital the quantities specified in the recipe were found sufficient for about 90 persons. The dish was very popular with all classes.

A tendency of the meat to crumble when served is somewhat prevented by adding six eggs to the recipe. This makes the meat more compact and increases its attractiveness.

The reason for the substitution of corn starch for flour was stated on page 155 and is referred to in the recipe for the gravy to serve with chopped roast. The fat that cooks out of the meat will be sufficient for basting.

It has been found a waste of oven room, and hence of fuel, to cook beef in small loaves. The dish is quite as attractive if the meat is packed tightly in the pan.

If onions are not available, or a change of seasoning is desired, one ounce of thyme may be used to advantage.

LEAFLET NO. 6.

FOR CHEFS

RECIPE NO. 2

GRAVY TO SERVE WITH CHOPPED ROAST

Amounts for 100 persons

Bones (from meat used in	Salt, 7 ozs.
roast; see leaflet No. 5).	Pepper, 1 teaspoonful.
Beef dripping, $1\frac{3}{4}$ lbs.	Onion, chopped, 1 lb.
Flour, $1\frac{3}{4}$ lbs.	Water as directed.

Put the bones into a stock kettle with fourteen quarts of water and cook for two hours. Draw off the stock through a strainer and put it into a clean kettle, saving out three pints.

Put the beef dripping into a large sauce pan and, when hot, add the flour to it, stirring to prevent lumps. Cook until smooth. Season with salt, pepper and finely chopped onion. Thin with the three pints of stock saved for this purpose and add to the remainder of the stock in the kettle. Cook gently for a half hour, when it will be ready to serve.

Modifications.—In a hospital in which the recipes have been tried with considerable care the following modifications have been found useful.* The reasons for these changes are explained in the suggested modifications of the method of making gravies, Leaflet No. 2, and are referred to briefly in the following statements taken from the report rendered by this hospital:

*The experience with this recipe at another hospital confirms the usefulness of the suggested modifications.

REVISED RECIPE FOR GRAVY TO SERVE WITH CHOPPED ROAST

Stock, 8 qts.	Salt, 6 ozs.
Cold water, 1 qt.	Pepper, 1 teaspoonful.
Corn starch, 1 lb.	Onions (chopped), 1 lb.

Put the finely chopped onions in the stock and cook until soft. Blend the corn starch with the cold water, stirring carefully to avoid lumps; add seasoning; boil for 50 minutes or longer; then serve. Be careful to begin the gravy in time so that the starch will have an hour to cook after it has been added to the boiling stock.

In this particular hospital it was found unsatisfactory to cook the flour (or corn starch) in hot fat owing to the mechanical difficulty of stirring so large a mass of fat and flour as would be required for gravy sufficient to serve 1000 or more persons. The gravy was very likely to be lumpy. The reason for adding corn starch instead of flour was chiefly that of economy, sufficient corn starch to make a good gravy being slightly cheaper than the required amount of flour. It was found more economical to allow plenty of time for cooking the gravy in hot water than to provide the extra labor which would be necessary to ensure a gravy of uniform consistency when cooked in hot fat.

It was also found in this hospital that large quantities of good stock could not be made from raw bones in two hours. The gravy was light colored and unattractive. The stock was, therefore, prepared the day before it was to be used, in the following manner:

About noon, clean, raw bones are put into a large stock pot, together with any cooked bones from roast meat and pieces of cooked meat, gristle, etc., that cannot be served otherwise. The cooked bones from roast meat give color to the stock. The whole is covered with water and cooked gently the rest of the day and all night. Heat must be maintained during the night to avoid danger of decomposition. The next morning the stock is drawn off and strained, and the liquid fat remaining on the

top of the stock is drawn into another vessel and set aside for other uses.

Still another method of making stock has proved satisfactory.

The washed, raw bones from beef flamand (see Recipe No. 7) or from chopped roast are put into a meat roaster with no water and cooked for two or three hours. Then enough water is added to cover the bones and the whole simmered gently several hours, or all night. In the morning the stock is drawn off as usual. The meat adhering to the browned bones in the roaster gives color to the stock.

LEAFLET NO. 7

FOR CHEFS

RECIPE NO. 3

BEAN SOUP

Amounts for 100 persons

Beans, 12 lbs.	Black pepper, $\frac{1}{2}$ teaspoonful.
Salt pork, 4 lbs.	Flour, 1 lb.
Onions, 1 lb.	Salt, 1 lb.
Red pepper, $\frac{1}{4}$ teaspoonful.	

Wash the beans thoroughly and in the forenoon put them to soak in about 20 quarts of cold water, allowing them to soak all day. At night pour off the water and put the beans into a stock kettle with 20 quarts of fresh cold water and with the pork and onions. Allow them to cook very slowly over night. In the morning strain, rubbing the beans through the strainer, and add sufficient water to make 33 quarts. Now heat to the boiling point.

Blend the flour with one quart cold water, stirring until smooth and free from lumps. Thin with one quart more of water and add to the soup. Cook the whole a half hour longer. While adding the flour, stir rapidly so that it will not lump.

When done, the soup should measure about 36 quarts.

Bean soup is a highly nutritious dish and can very well take the place of meat in a dietary for persons who do not expend much energy, as non-working patients. For such it needs to be combined only with bread and some attractive dessert. There need be no vegetables with it, unless it be some light vegetable

to lend attractiveness to the meal rather than to provide nourishment.

For workers, excepting those doing the very hardest of manual labor, little or no meat is needed at a meal with bean soup, but boiled potatoes with a gravy made from drippings with flour is desirable. When meat is served for employees and the patients who perform extra hard labor, it need not be in great quantity.

Modifications.—The following suggestions are taken from reports received from two of the hospitals in which this recipe was tried with considerable care. At the time of trial at one of the hospitals (spring and summer of 1901) 12 pounds of beans were more than could be afforded at the current price, and 11 pounds were substituted with satisfactory results. Half a pound of corn starch was also substituted for the pound of flour. Eight ounces of salt proved sufficient for seasoning. It was found at both hospitals that the pork and a considerable quantity of the beans would not go through the strainer, and were, therefore, wasted. In addition, the work of pressing the beans through the strainer required more time than could well be afforded with the available kitchen force. The dish was quite satisfactory when made in small quantities for hospital wards, but much less so when made in large amounts for the general hospital population.

LEAFLET No. 8

FOR CHEFS

RECIPE No. 4

INDIAN PUDDING

Amounts for 100 persons

Corn meal, 3 qts.	Cassia, $2\frac{3}{4}$ ozs.
Skim milk, 21 qts.	Salt, $\frac{1}{3}$ lb.
Molasses, $2\frac{1}{2}$ qts.	Butter, $\frac{1}{3}$ lb.
Ginger, $2\frac{3}{4}$ ozs.	

Put the milk into a stock kettle and heat it. When it boils, add the molasses. Mix the meal, salt and spices thoroughly together and sprinkle them into the hot milk, stirring briskly all the time. Then cook the whole for one hour, after which stir in the butter.

Now put the partly cooked mixture into tins which have been greased with drippings and bake in a moderate oven for two and a half hours.

Indian pudding is a hearty dessert, furnishing a large amount of carbohydrates. It can be served in almost any dinner in which the main dish is not very hearty or after beans when no meat has been served. Its digestibility will depend on the long, slow cooking.

Modifications.—The following modifications and suggestions are taken from a report received from one of the hospitals:

REVISED RECIPE FOR INDIAN PUDDING

Corn meal, 5 lbs.	Ginger, $2\frac{3}{4}$ ozs.
Skim milk, 26 qts. (or water 20 qts. and condensed milk 6 qts.)	Cassia or cinnamon, $2\frac{3}{4}$ ozs.
	Salt, 5 ozs.
	Butter, 5 ozs.
Molasses, 1 qt.	

The liquid materials are mixed in a large kettle and the carefully mixed dry materials added with constant stirring. The heat is turned on and the mixture stirred until it boils. After boiling for about 4 hours, or longer, the butter is added, and the mixture put into well greased dripping pans and baked in a moderate oven for about one hour, when it is ready for serving.

While the original recipe proved sufficient for unemployed patients it was found insufficient for the employed patients and employees, hence the slightly larger quantities in the revised recipe.

Sugar was substituted for some of the molasses in order to reduce the expense, since one quart of molasses and one pound of sugar cost not far from 11 cents, while $2\frac{1}{4}$ quarts of molasses cost not far from 15 cents, a saving in the revised recipe of 4 cents on the quantity for 100 persons.

Where sufficient dairy milk cannot be readily obtained, condensed milk usually forms a satisfactory substitute. Cinnamon also makes a desirable substitute for cassia.

The reason for adding the cereal to cold water and bringing to a boil is that one man cannot stir the cereal into the water sufficiently fast to prevent lumping. When the cereal is added to the cold liquid the stirring can be done by patients, but not when the cereal is added to the hot liquid; hence it is regarded as economy of labor as well as more likely to give satisfactory results if the meal is added to the cold liquid.

The original recipe calls for a relatively short period of cooking in the oven. In the hospital here referred to the mixture was cooked for a longer time in the steam kettle and placed in the oven only long enough to brown. This method gives less waste.

In using the recipe for large quantities enough for 1000 persons or more, the amount of spices should not be increased in direct proportion to other materials; 18 ounces of ginger and 18 ounces of cinnamon have been found sufficient for 1000 persons.

In another hospital it was found that the quantities specified were sufficient for 150 persons, and the dish was not very popular. In making the pudding the corn meal was mixed with a little cold milk and then added to the hot liquid, thus avoiding lumping.

LEAFLET No. 9

FOR CHEFS

RECIPE No. 5

MEAT AND POTATO HASH

Amounts for 100 persons

Cold meat of any kind, 25 lbs. Salt, 12 ozs.

Cold boiled potatoes, 25 lbs. Pepper, 1 oz.

Onions, 1 lb. Stock or gravy, 6 qts.

Chop the meat and potatoes separately. Chop the onions very fine. Mix all together, adding the salt and pepper and the stock or gravy. Put a half pound of beef dripping into a large pan and when hot put the hash into the pan. Cook for one hour in a moderate oven.

If the meat used be corned beef, add less salt, only sufficient to suit the taste.

This hash is to be served for supper to working patients and

employees. At seasons when it can be made up the night before and kept uncooked over night, it can be used as a breakfast dish for the same classes.

Modifications.—In one hospital reporting results with this recipe the quantity of hash was found rather liberal for the unemployed patients, but for the working patients and employees the amounts were about right and the dish was found very desirable.

In another hospital the quantity of dripping called for ($\frac{1}{2}$ pound) was found too much. With a little less dripping the recipe proved very satisfactory.

LEAFLET No. 10

FOR CHEFS

RECIPE No. 6

BOSTON BROWN BREAD

Amounts for 100 persons.

Rye meal, 6 cups.	Soda, 12 teaspoonfuls.
Indian meal, 6 cups.	Salt, 12 teaspoonfuls.
Flour, 12 cups.	Molasses, $1\frac{1}{2}$ qts.
Buttermilk or sour milk, $4\frac{1}{2}$	
*qts.	

Mix the dry materials, excepting the soda, together. Dissolve the soda in a little warm water. Mix the milk and molasses and add to the mixture the dissolved soda, stirring well.

Now put together the dry mixture and the liquid mixture, stirring and beating thoroughly. Turn into tins well greased with beef dripping. Cover and steam 6 hours.

Boston brown bread is attractive and seems specially acceptable when served with beans.

Modifications.—In one hospital this recipe, with certain modifications, has proved very satisfactory for unemployed patients, but the quantities are scarcely sufficient for working patients and employees. The amount of liquid required depends upon the absorptive power of the flour, and in actual practice it was found desirable to use less liquid. The quantity of molasses called for in the recipe made the brown bread too sweet for the average taste and increased the expense unnecessarily.

It was found that the taste and texture of the brown bread was improved and the cost reduced by substituting graham flour for some of the white flour. By using half graham and half white flour the cost of the mixture was reduced nearly 30 per cent. as compared with the cost of the white flour when used alone.

In the hospital rendering this report, sour milk was very difficult to get and buttermilk could not be obtained at all; water, however, was found to give entirely satisfactory results. Owing to the omission of sour milk or buttermilk and the reduction in the quantity of molasses there was insufficient acid to unite with the soda and make the mixture light, and at best the acidity of sour milk and molasses is variable. For these reasons it was found more satisfactory to use cream of tartar. It was also found that when soda was added before the cereals much of the gas generated was lost during the beating and stirring while the dry materials were being added. Flour, soda and cream of tartar, or flour and baking powder when much beaten and stirred give a tough dough, especially when in large quantities. The recipe was tried a great many times and in various ways. The modification which gave the best results was as follows:

REVISED RECIPE FOR BOSTON BROWN BREAD

Rye meal or flour, 1 lb. 12 ozs.	Water, 4 qts.
Indian meal, 1 lb. 14 ozs.	Soda, 2 ozs.
Wheat flour, 1 lb. 7 ozs.	Cream of tartar, 2 ozs.
Graham flour, 1 lb. 7 ozs.	Molasses, 1 pint.

Sift together thoroughly all the dry materials except the soda and the cream of tartar, dissolve the soda in a little of the water; in another pan dissolve the cream of tartar in some water. Mix together the rest of the water with the molasses. Now add the mixture of water and molasses to the dry materials, stirring and beating thoroughly to remove all lumps; then add the dissolved cream of tartar and mix slightly; and, finally, add the dissolved soda. At this point it is important to stir

the mixture only enough to blend with it the dissolved soda and cream of tartar.

Now put the dough quickly into tins well greased with lard or beef drippings, cover tightly and steam 6 hours.

In another hospital this recipe has been very popular with the following modifications. It was found desirable to state the quantities of flour and meal by weight rather than bulk, as indicated in the above modifications. Attention was also called to the fact that the tins in which the dough was placed should not be more than half full, otherwise the mixture will overflow upon rising. The bread was improved in quality by removing it immediately from the tins in which it was steamed and letting it stand in a warming oven for at least an hour.

The quantity of molasses called for made the bread too sweet and better results were obtained by using 5 quarts of sour milk, a pint and a half of molasses and 12 teaspoonsful of cream of tartar, rather than the amounts called for in the original recipe.

LEAFLET No. 11

FOR CHEFS

RECIPE No. 7

BEEFSTEAK FLAMAND

Amounts for 100 persons

Beefsteak (shoulder, chuck or neck), 35 lbs.

Cloves, 4.

Drippings, 1 lb.

Bay leaves, 4.

Flour, $\frac{1}{2}$ lb.Onions, chopped fine, $\frac{1}{2}$ lb.

Stock or water, 7 qts.

Cut the steak into pieces about one inch thick and again into helpings weighing not more than four ounces each.

Into a large pan put a half pound of beef drippings or pork fat and set on the range to heat. Pepper and salt the meat well and put it into the hot pan, then set it into a hot oven to brown.

While the meat is browning, put a half pound of drippings or fat into a large saucepan and add to it a half pound of flour, cooking the two until light brown. Then add 4 cloves, 4 bay leaves, a half pound of finely chopped onions and 7 quarts of stock or water. Cook for a half hour. Remove the bay leaves

and pour the resulting gravy over the meat in the dripping pan. Then keep the meat in the oven, reduce the heat and cook slowly for two hours.

Beef steak flamand can be gotten ready Saturday afternoon and the cooking completed Sunday, allowing it to be served at the Sunday dinner. This may sometimes be convenient when there is a shortage of help for Sunday.

Beef steak flamand is a dish suitable for employees and working patients. If served to non-working and infirm patients, a considerable waste may be expected, especially when neck and chuck or shoulder is used for the flamand. Its tenderness and palatability and attractiveness will depend on the care taken to first put it into a hot pan and brown it in a hot oven, not leaving it too long, but cooking it for a long time in the slow oven. The short exposure in the hot oven sears the surface without affecting the inside. The long slow cooking then softens the fibers of the meat.

Modifications.—In two hospitals reporting experience with this recipe beefsteak flamand was considered to be a very desirable dish, but one requiring considerable time in preparation. The following suggestions are taken from the report rendered by one of the hospitals:

If the meat can be browned the day before it is eaten, and partially cooked in gravy, as suggested in the recipe, the cooking can be finished the next day with a saving of time in the morning. It is not practicable to do all the work on one day when large numbers are served with the dish at one time.

The quantity of gravy called for in the original recipe was not found sufficient to cover the meat, and since the object is to soften the meat fibers it is important to have more gravy. Corn starch has been found preferable to flour for thickening gravies as already explained.

It was found that the meat browned more quickly if seared in dripping pans on top of the stove without use of extra fat. A hot fire is necessary to brown meat in the oven, a cooler fire is needed to cook the flamand after the gravy is added. Hence,

there is some economy of fuel, as well as time, if the meat is browned on top of the stove instead of in the oven. The following modifications of the recipe is therefore suggested:

REVISED RECIPE FOR BEEFSTEAK FLAMAND

Beefsteak (shoulder, chuck or neck), 35 lbs.	Bay leaves, 4.
Corn starch, 1 lb.	Onions (chopped fine), $\frac{1}{2}$ lb.
Cloves, 4.	Stock, 12 qts.
	Cold water, 2 qts.

Cut the steak into pieces about one inch thick, and again into helpings weighing not more than 4 ounces each. Prepare and salt the meat well and put it into hot dripping pans on the range to brown; as fat cooks out pour it off. Turn the meat and keep in dripping pans until well browned.

Meanwhile make a gravy. Mix the corn starch and the cold water and add to the hot stock in which the onions have been cooking; cook five minutes, pour the gravy over the meat in the dripping pan, put in the cloves and bay leaves, put the meat in the oven and cook slowly for 2 hours. Stir occasionally, basting with the gravy.

LEAFLET No. 12

FOR CHEFS

RECIPE No. 8

CORN CHOWDER

Amounts for 100 persons

Salt pork, 2 lbs.	Pepper, 1 oz. (or a trifle less).
Onions, 1 lb. (or a trifle less).	Milk, 10 qts. (or 4 qts. evaporated milk).
Water, 20 qts.	Flour, 1 lb.
Potatoes, 24 lbs.	Canned corn, 12 cans.
Salt, 1 lb. (or a trifle less).	

Cut the pork into inch cubes and put them into a pan in the oven. Take them out when cooked to a light brown. Skim out the cubes of pork, saving the fat for further use, and put the cubes into a stock kettle. Having chopped the onions, add them to the cubes. Now add the water and cook for a half hour. Then add the potatoes, cut into small pieces, add the salt and pepper and cook for fifteen minutes longer.

Turn the fat from the pork into a large sauce-pan and cook the flour in it, stirring all the time until it is smooth. Then add 2 quarts of the milk to it. Stir well and add it to the chowder in the stock kettle and cook ten minutes. Stir carefully and add the corn and the rest of the milk. Let the whole come to the boiling point, when it will be done and ready to serve.

The above recipe gives a thin chowder into which the average patient will crumble his bread. For non-working patients a very acceptable dinner consists of corn chowder, bread, potatoes and gravy. If desired, this can be made a little more elaborate by the addition of a dessert, as a rice pudding. For working patients and employees add to the above some attractive meat dish. The chowder contains not a little nourishment and being a vehicle for the use of bread, helps to furnish a substantial meal. If it is desired to use it without bread, it should be made thicker by using less water.

The above recipe yields about 40 quarts of cooked chowder.

Modifications.—The following modifications and suggestions have been received concerning this recipe.

If the original recipe be followed the potatoes are apt to be cooked too much and the starch not enough. The corn meal also needs longer cooking. The milk is better added just before serving, as it curdles quickly when cooked in a mixture containing much salt. The chief difficulty in the way of the liberal use of corn chowder is in the preparation of the potatoes.

If the corn chowder is used for unemployed patients it forms the main dish at dinner, which is the only time they are likely to get meat during the day. Hence, it seems advisable to increase the amount of pork. The amount of salt and pepper as originally specified has been found too much for the average taste.

The original recipe does not state whether the potatoes are to be weighed before or after paring. Twenty pounds of pared potatoes have been found sufficient.

Condensed milk can be used profitably in many cases where there is not an abundance of dairy milk. Corn starch is more

economical than flour. The modified recipe as used by this hospital is as follows:

REVISED RECIPE FOR CORN CHOWDER

Salt pork, 4 lbs.	Pepper, $\frac{1}{3}$ oz.
Onions, 1 lb.	Milk (condensed), 3 qts.
Water, 20 qts.	Corn starch, 10 ozs.
Potatoes (pared), 20 lbs.	Canned corn, 12 cans.
Salt, $4\frac{1}{2}$ ozs.	

Cut the pork into inch cubes and put them into a pan in the oven, removing when well browned. Put the canned corn and the onions (finely chopped) into a steam kettle and cook for one-half hour. Mix the corn starch with the remainder of the water (2 quarts) and stir into the boiling corn. Add the browned cubes of salt pork and the seasoning materials and cook one-half hour longer.

Now add the potatoes which have been cut into small pieces. Allow 30 minutes for the potatoes to cook, add the condensed milk and serve at once.

The fat that tries out of the salt pork in the oven is drawn off and not used in the chowder. The amount of salt pork used will depend upon the quality of the pork and must be regulated by taste.

FOR CHEFS

RECIPE No. 9

POT ROAST OF BEEF WITH GRAVY

Amounts for 100 persons

Beef (chuck or shoulder), 35 pounds.

Trim and wipe the beef carefully. Put it into a pot roaster and cook until well seared. Then sprinkle with salt and pepper and add 4 quarts boiling water. If the water cooks away before the meat is done, add more water. Cook for three hours. Adding the water gives a moist heat which softens the fibers of the meat and helps to make it more tender.

GRAVY FOR POT ROAST

Flour, 1 $\frac{1}{4}$ lbs.	Onions, chopped fine, 2 ozs.
Salt, 5 ozs.	Drippings, 1 $\frac{1}{4}$ lbs.
Pepper, 1 teaspoonful.	

Scrape the brown gravy from the bottom of the roaster in which the meat has been cooked and rinse the kettle with 5 quarts boiling water. Now draw off the gravy, leaving the fat in the roaster.

Put the gravy into a stock kettle and add 6 quarts boiling water. Draw off the fat from the roaster. Put it into a sauce pan and add enough more fat to make 1 $\frac{1}{4}$ pounds or pints. Put on the range and when hot add the flour and cook until smooth. Then add to the gravy in the stock kettle. Add the salt, pepper and onion and cook for a half hour. While adding the thickening stir rapidly to keep it from lumping.

Instead of using flour for thickening, and blending this with hot fat, 10 ounces of corn starch may be used and the gravy made as described in Leaflet No. 2, page 155, and in Leaflet No. 6, Recipe No. 2, page 160.

This meat dish is to be served at dinner to working and active patients and to employees. It need rarely be served to the infirm and idle, and then only by way of variety. It may be accompanied by potatoes and one other vegetable, and bread. If a dessert be served at the same meal, one of low nutritive value but appetizing should be chosen, as a blanc mange.

Modifications—The following suggestions have been received from one of the hospitals trying this recipe. The meat should remain dry in the roaster until not only seared but browned. In making the gravy it was found preferable to draw off the stock, put the dripping directly into the roaster, when melted add the flour and cook until smooth and then return the stock to the kettle. Or, still better, omitting the dripping altogether, blend the flour with cold water and add to the liquid in the roaster cooking one-half hour, and then strain.

FOR CHEFS

RECIPE No 10

BEEF STEW

Amounts for 100 persons

Beef (shin, flank or neck), 35 lbs.	Potatoes, 10 lbs.
Onions, 3½ lbs.	Salt, 1 lb., or a little less.
Carrots, 7 lbs.	Flour, 2 lbs.
Turnips, 7 lbs.	Pepper, ⅔ oz.
	Water, 20 qts.

Wipe the meat clean, cut it into small pieces, and put into a stock kettle with 20 quarts of water which has been already brought to a boil. Cook slowly for 1½ hours. Then take out the meat and draw off the stock through a strainer.

Carefully rinse the kettle, and see that no slivers of bone are left in it; put the onions, turnips and carrots into the stock kettle and turn the strained stock onto them. Cut the meat from the bones, dividing it into small pieces, and put it into the kettle with the vegetables. Cook the whole for one hour and then add the potatoes and cook for 15 minutes longer.

Now blend the flour with some cold water and add it to the stew. Stir very carefully so as not to break the vegetables and cook for a half hour longer, when it will be ready to serve.

From the beginning this stew must be cooked slowly.

FOR CHEFS

RECIPE No. 11

BROWN FRICASSEE OF BEEF

Amounts for 100 persons

Meat free from bones, 24 lbs.	Pepper, 1 oz.
Onions, ½ lb.	Flour, 2 lbs.
Salt, ½ lb.	Beef drippings, 2 lbs.

Cut the meat into pieces about two by three inches in size. Put the dripping into two large dripping pans and set on the range; when hot, put half the meat into each pan, add pepper, salt and flour and mix well, stirring until all is covered with the fat; then put into a hot oven and stir from time to time until well browned.

Before putting the meat into the oven, put the bones into

a stock kettle with 15 quarts of water and cook until the meat in the oven is browned, then draw off the stock through a strainer and put into a clean kettle.

Now pour off the fat from the pans and put it on the range in a large sauce pan; when hot, add the flour, stir until smooth, and thin with two quarts of the stock which has previously cooled. (For use of corn starch and cold water, instead of flour and hot fat, see Leaflet No. 2, p. 155. Add the thickened mixture to the stock in the kettle, add salt, pepper and onions, and lastly the meat. Cook slowly $2\frac{1}{2}$ hours.

FOR CHEFS

RECIPE No. 12

CURRY OF MUTTON OR BEEF

Amounts for 100 persons

Mutton forequarter (or beef), Salt to taste.

32 lbs.

Curry powder, $1\frac{1}{2}$ ozs.

Flour, 3 lbs.

Rice, 8 lbs.

Put 20 quarts of water into a stock kettle and when it boils put in the meat and cook slowly for $2\frac{1}{2}$ hours. Then remove the meat and cut it from the bone into pieces about 2 by 3 inches in size.

From the kettle draw off the stock in which the meat has cooked, until the fat shows. Then draw the fat into a separate pan. Wash out the kettle to get rid of the slivers of bone. Put the meat back into the stock kettle, pouring the strained stock over it but reserving two quarts of the stock to mix with thickening.

Put 3 pounds of the fat saved from the stock into a sauce pan on the range, and when hot add to it 3 pounds of flour, stirring until smooth. (See suggested changes for making gravies in Leaflet No. 2, p. 155. Then add to this the two quarts of stock above saved; also the salt and curry powder. Stir the mixture well and add it to that in the stock kettle, cooking the whole a half hour longer.

The 8 pounds of rice must be boiled to serve with this curry. The curry should be put on platters and the rice put about the edge.

A dinner for the better classes may consist of curry of mutton with rice, potatoes, turnips, bread.

FOR CHEFS

RECIPE No. 13

MUTTON STEW

Amounts for 100 persons

Mutton, neck and flank, 35 lbs.	Flour, 2 lbs.
Onions, 3 lbs.	Salt, 1 lb.
Carrots, 6 lbs.	Pepper, a scant tablespoonful.
Turnips, 6 lbs.	Water, as directed.
Potatoes, 10 lbs.	

Put 20 quarts of water into a stock kettle and heat. When it begins to boil, put in the meat and cook 3 hours. Then take out the meat and cut it from the bones into small pieces, say 2 by 3 inches in size. Draw off the stock carefully from the kettle in which the meat was cooked, running it through a strainer, leaving the fat in the kettle. Then draw off the fat into another dish and put away for other use. Rinse out the stock kettle, being sure to get out all slivers of bone; in all preparations where mutton is used care must be exercised to avoid the dangers from splinters of bone.

Now put the onions, carrots, turnips and meat into the stock kettle and pour over them the strained stock, having reserved a quart of the stock with which to blend the flour. Cook 1 hour, and then add the potatoes and cook 15 minutes longer. Mix the salt and pepper with the flour and blend carefully with the stock reserved for that purpose. Add this to the stew, stirring carefully so as not to break the vegetables, and cook for a half hour.

Mutton stew forms a nourishing and satisfying dish at low cost. It can be used in dinners as illustrated herewith: For the infirm and idle; mutton stew, bread; or mutton stew, bread, hominy pudding. For the workers and active persons; mutton stew, bread, steamed potatoes; or mutton stew, steamed potatoes, bread, hominy pudding.

FOR CHEFS

HASHED MEAT

RECIPE No. 14

Amounts for 100 persons

Cold meat, 25 lbs.

Salt, 6 ozs.

Stock or gravy, 3 qts.

Pepper, $\frac{1}{2}$ oz.

Chop the meat and moisten it with the stock or gravy, adding the pepper and salt. Put into a stock kettle and cook at a low temperature until well heated through. Serve on slices of toasted bread. While cooking this hash should not boil. If it does, the meat may be tough and dry.

Hashed meat makes an excellent dish to serve at supper for employees and the better and more active classes of patients. It always furnishes a way of advantageously using up cold, left-over meats of almost any kind.

Modifications.—One hospital reports that 6 quarts of stock or gravy were found desirable and that 4 ounces of salt was sufficient instead of 6 ounces. The report received from this hospital also suggests the cooking of this hashed meat in "tin food boxes placed in boiling water in a 'bain-marie'", in order to avoid scorching or hardening of the meat.

FOR CHEFS

SALT PORK AND BATTER

RECIPE No. 15

Amounts for 100 persons

Salt pork, 12 pounds.

Boil 12 pounds of salt pork slowly for three hours. When cold, slice as thinly as possible and dip into batter and fry in hot drippings until of a nice brown.

BATTER FOR ABOVE

Milk, $1\frac{1}{2}$ qts.

Baking powder, 3 teaspoonfuls.

Flour, $1\frac{1}{2}$ lbs.

Salt, 3 teaspoonfuls.

Eggs, 3.

Beat the eggs and add the milk to them. Mix the baking powder and salt with the flour and add the milk and eggs to the dry mixture. Beat well until there are no lumps, when it will be ready for use.

This dish may be served to employees and the better classes of patients. It is an especially good dish for workers, being cheap and hearty, excellent for cold weather and usually well liked. The pork used to flavor the bean soup (Recipe No. 3) may frequently be utilized in this recipe.

The batter is suitable as a vehicle for other things than pork, as tripe, apples, etc. With tripe or apples, the quantities must be doubled for the same number of people.

FOR CHEFS

RECIPE No. 16

MEAT AND HOMINY CAKES

Amounts for 100 persons

Hominy, $3\frac{1}{2}$ lbs.	Flour, $\frac{1}{2}$ lb.
Cold meat, 7 lbs.	Salt, $5\frac{1}{2}$ ozs.
Cold boiled salt pork, $\frac{1}{2}$ lb.	Pepper, $\frac{1}{2}$ oz.
Onions, $\frac{3}{4}$ lb.	

Chop the onions fine and boil them with the hominy in 7 quarts of water for 3 hours. When they have been cooking two hours, sprinkle in both the salt and flour, stirring rapidly. Chop the meat and pork fine and when the hominy has cooked 3 hours, mix all together, including the pepper. Then set away to cool. When the mixture is cool, flour the hands and make it into small cakes weighing about $1\frac{1}{2}$ ounces each. Fry these to a nice brown in beef drippings or pork fat.

These meat and hominy cakes make a pleasing and cheap extra for working patients and employees for supper. They may be used for breakfast by making up the mixture the preceding afternoon and frying in the morning.

FOR CHEFS

RECIPE No. 17

COD FISH AND HOMINY

Amounts for 100 persons

Codfish (free from bone), 7 lbs.	Flour, $1\frac{3}{4}$ lbs.
Hominy, $3\frac{1}{2}$ lbs.	Onions, chopped fine, $\frac{1}{4}$ lb.
Beef drippings or pork fat, $1\frac{3}{4}$ lbs.	Pepper, $\frac{1}{2}$ oz.

Wash the fish thoroughly and soak them over night. In the morning take out all the bones and pick the fish into small pieces. Put into cold water and bring to the scalding point but do not let it boil. While the dish is heating make the sauce.

Put 3½ pounds of raw hominy into 7 quarts of water and cook slowly over night. If the water cooks away, add enough to keep the total quantity about 7 quarts.

Put the dripping and chopped onion on the range together and cook till the onion turns a light yellow. Then carefully add the flour and cook until smooth. Add 14 quarts of hot milk, pouring it all in at once and stirring rapidly to prevent lumping. Add the pepper and the 7 quarts of cooked hominy. Stir well and add the strained fish. Taste and add more salt if needed. This sauce, without the hominy and fish, is useful for many creamed dishes.

Salt fish and hominy make a dish suitable to give working patients and employees for breakfast. It is cheap, very palatable and adds variety to the dietary.

FOR CHEFS

RECIPE No. 18

COD FISH CAKES

Amounts for 100 persons

Salt cod, free from bones, 15 Pepper, 1 oz.

lbs.

Beef drippings or pork fat, 3

Raw pared potatoes cut small, ozs.

15 qts.

The fish must be well washed, but not soaked, before being freed from the bones. Put the potatoes into stock kettle, lay fish on top, add boiling water to cover, and cook until the potatoes are done, about 20 minutes. Then drain off the water and let mixture dry in the kettle for about three minutes, then take up, add dripping and seasoning and mash well. If too fresh, add salt to taste. Make into cakes of about 2 ounces each and fry in hot drippings or pork fat, using a generous amount in the frying pan.

Where tried codfish cakes have been well liked and, as codfish is comparatively cheap, a nutritious and attractive dish is furnished at low cost. With the labor at hand it is frequently not practicable to serve fish cakes to all classes of patients. They may be given only to the employees and better class of patients and the rest of the mixture placed in pans, nicely browned in the oven, and served as fish hash.

FOR CHEFS

RECIPE No. 19

SCOTCH BROTH

Amounts for 100 persons

Shin of beef, 25 lbs.	Cabbage, shredded, 3 lbs.
Pearled barley, 5 lbs.	Salt, 1 lb.
Turnips, 7 lbs.	Pepper, 1 oz.
Carrots, 7 lbs.	Water, 25 qts.
Onions, 5 lbs.	

Have the shins sawed into sections. If they are chopped, the bones will be splintered and the broth will contain dangerous spicules of bone. Cut the meat from the bones, dividing the meat into pieces small enough to serve as individual portions. Put the meat, bones and barley into a stock kettle with 25 quarts of cold water and cook very slowly for three hours. Then take out the bones.

Having cut the vegetables into small pieces, add them to the meat and barley. Add the seasoning. Now cook for one hour longer. The cooking must be done slowly, by simmering instead of boiling; otherwise the meat will be tough and the broth will have less flavor and nutritive value.

Scotch broth may be served at dinners, illustrative examples of which are as follows: For the infirm and idle, Scotch broth, bread, potatoes. For workers and active persons, Scotch broth, bread, potatoes, rice pudding.

FOR CHEFS

RECIPE No. 20

SPLIT PEA SOUP

Amounts for 100 persons

Split peas, 12 lbs.	Salt, 1 lb.
Salt pork, 4 lbs.	Mixed herbs, 1 oz.
Onions, 2 lbs.	Pepper, 1 oz.
Flour, 1 lb.	Water, as directed.

Wash the peas well in cold water, and put them to soak in 20 quarts of fresh cold water, leaving them for 7 hours. Then add the pork and onions and cook very slowly overnight. In the morning strain, by rubbing through a strainer, and add water enough to make 30 quarts. Add the salt, herbs and pepper. Take 1 pound of flour and blend with 1 ounce of cold water, stirring until smooth and free from lumps. Thin with 2 quarts of water and add to the soup, stirring rapidly so that the flour will not lump. Cook the soup for a half hour after adding the flour. When done there should be about 35 quarts of soup.

The above recipe produces a rather thick and highly nutritious soup, rich in protein and fat. This soup should be served at dinner and when served to the infirm and idle should not be accompanied by meat, nor by potatoes or other vegetable. Bread should be served with it and will in many cases be crumbled into it by the patient. Where no meat or vegetable accompanies it, a dessert should be served. This may consist of any convenient pudding, as bread or rice pudding.

Illustrative dinners are as follows: For the infirm and idle, pea soup, bread, spiced pudding; or pea soup, bread, cereal pudding. The puddings should be served as a separate course after the soup and bread has been eaten. For workers and active persons, pea soup, bread, boiled shoulder, potatoes, spiced bread pudding; or pea soup, bread, curry of beef with rice, potatoes, cereal pudding.

FOR CHEFS

RECIPE No. 21

TOMATO SOUP

Amounts for 100 persons

Shin of beef, 16 lbs.	Allspice, 35.
Canned tomatoes, 4 gals.	Bay leaves, 12.
Beef drippings, 1½ lbs.	Water, 8 qts.
Flour, 2 lbs.	Onions, 3 lbs.
Sugar, ½ lb.	Stock (obtained from beef), shin
Salt, 1 lb.	16 qts.
Peppercorns, 35.	

Put the beef shin into a stock kettle with 20 quarts of cold water. Cook slowly for three hours, after which draw off the water and save it for soup stock. Add to it enough hot water to make 16 quarts. Save the shin meat for use in a hash for supper, or it can be served after the soup at the dinner.

Put the tomatoes and seasoning, excepting the pepper and salt, into a stock kettle with 8 quarts of water and cook one half hour. Then strain, rub through a sieve, and return to stock kettle. Now add 12 quarts of the stock obtained from the shins, saving 4 quarts of the stock with which to blend the flour.

Put the beef drippings on the stove to heat in a large sauce pan and when hot add the flour and stir until there are no lumps. Then add the 4 quarts of stock above saved to the flour and fat, and stir well until smooth. Then add this mixture to the soup. Add the pepper and salt and stir well. Cook for one half hour and serve.

If desired the flour (or one half its weight of corn starch) can be blended with the cold stock and cooked sufficiently to soften the starch grains, as indicated in previous recipes (see Recipe No. 2).

Tomato soup is attractive to the taste, but not so nutritious as pea or bean soups. It must be associated, in a meal, with other foods of high nutritive value. The following will serve as illustrative dinners in which it may be served. For the infirm and idle: Tomato soup, potatoes and gravy, bread, Indian pudding; or tomato soup, boiled shin of beef, potatoes and

gravy, bread. For workers and active persons: tomato soup, braised beef and gravy, potatoes, bread; or tomato soup, chopped roast, potatoes, bread.

As this soup is attractive to the taste a dessert is not especially called for at the same meal. Whatever dessert may be served at such a meal should be one of high nutritive value. An abundance of bread should be served with the soup. Croustons may be made to go with it.

FOR CHEFS

RECIPE No. 22

BOSTON BAKED BEANS

Amounts for 100 persons

Beans, 10 qts.	Mustard, 2 teaspoonfuls.
Pork, streaked with lean, 5 lbs.	Baking soda, $\frac{1}{3}$ teaspoonful.
Molasses, $\frac{2}{3}$ pt.	Salt, 5 ozs.

Soak the beans 6 hours in 25 quarts of cold water, drain them, throwing the water away. Put the beans into a stock kettle with 16 quarts of fresh cold water and cook until the skin can be broken by blowing upon them, taking a few up in a spoon to test. Add to the beans the molasses, mustard, baking soda and salt, and put into dripping pans or bean pots. Then put the pork well down in the beans but not to the bottom of the dish, add the water in which the beans were boiled, seeing that they are well covered by it, put into a slow oven and cook overnight. From time to time look at the beans and add water if necessary. Keep warm in a slow oven until served.

When ready to serve the beans should be lightly browned on top, tender, and containing considerable moisture. In cooking beans the art rests in cooking slowly at a low temperature. If cooked too fast their cellulose will be toughened and their digestibility greatly lessened. Whether they be baked or only boiled the same rule holds. In the kettle it is best not to boil them but to let them simply simmer.

Where time necessitates the beans may be put directly into hot water without previous soaking and parboiled until the skins will break. In this case the water in which they are par-

boiled must be thrown away and not used to cover the beans in the oven. It is sometimes convenient when the beans are soaked in cold water to let them soak over night and cook the next day. In any case care must be taken to keep sufficient water in the beans to avoid their drying up.

Baked beans can be served as the principal dish of a dinner.

It is unnecessary to serve with them any other meat than the pork with which they are cooked. Beans may be used for dinner as follows:

For the infirm and idle, baked beans, brown bread, rice pudding; for workers, baked beans, brown bread, wheat bread, potatoes and gravy; for very hard workers and the more exacting, add the pork with which the beans were cooked to the meal as given for workers.

FOR CHEFS

RECIPE No. 23

CORN CAKE

Amounts for 100 persons

Cornmeal, 5 lbs.

Baking powder, 1 lb.

Flour, 10 lbs.

Sugar, $1\frac{1}{3}$ lbs.Drippings, $2\frac{1}{2}$ lbs.

Milk (or water), 8 qts.

Salt, $\frac{1}{3}$ lb.

Mix the corn meal, flour and salt together. Beat the sugar and dripping together until creamy; add the milk (or water), and then add the mixture of dry ingredients. Beat well and pour into large dripping pans and bake for $\frac{3}{4}$ of an hour or until the cake shrinks from the sides of the pans.

Corn cake is especially adapted for use at supper to give variety and lessen the consumption of bread. It could not be steadily used as a substitute for bread, as it contains a different ratio of the various food principles and notably less protein.

FOR CHEFS

RECIPE No. 24

INDIAN CHEESE CAKES

Amounts for 100 persons

Corn meal mush, 16 qts.

Salt, $\frac{1}{2}$ lb.Grated cheese, $6\frac{1}{2}$ lbs.

Pepper, 1 oz.

Put 16 quarts of water in stock kettle, and when it boils sprinkle in 4 quarts of corn meal, stirring actively while adding the meal so that it will not lump. When the mush has cooked 3 hours add salt, pepper and grated cheese, stir and turn off steam until cheese is all melted. (The mixture must not boil after cheese is added.) Take up into pans and when cool enough to handle, flour the hands and make into cakes of about 2 ounces each and fry to a nice brown in beef dripping.

NOTE.—If the cheese is too soft to grate, it may be cut into small pieces instead.

FOR CHEFS

CHEESE FONDU

RECIPE No. 25

Amounts for 100 persons

Milk, skimmed, 20 qts.	Salt, 2 ozs.
Bread crumbs, 10 qts.	Pepper, $\frac{1}{2}$ oz.
Grated cheese, 6 lbs.	Butter, 4 ozs.
Eggs, 20.	

Cut a sufficient number of loaves of bread once through the centre and once across the middle, making four pieces. Grate the inside of the loaf on a coarse grater by grasping the pieces on the crust side. Do not grate the crusts but save them for other use (See Recipe Nos. 30-33). Soak the grated crumbs in the milk; add the beaten eggs, the seasoning, and lastly the cheese. Mix well, turn into a buttered dish and bake for one hour.

Cheese fondu may be used as a nutritious and palatable dish to be served at supper to the better classes of people. A very excellent meal would be as follows:

Cheese fondu, bread, butter, gingerbread, tea.

FOR CHEFS

POTATOES AND CHEESE, WITH CREAM SAUCE

RECIPE No. 26

Amounts for 100 persons

Cold boiled potatoes, sliced, 30 lbs.	Salt, 4 ozs. Pepper, $\frac{1}{4}$ oz.
Cheese, grated, 8 lbs.	Onions, chopped fine, 1 oz.
Cream sauce (see below), 7 qts.	

Grease two large dripping pans, put a layer of potatoes into each, then a sprinkling of onion and seasoning, then a layer of cheese, and cover with cream sauce; add another layer of potatoes, then onions, seasoning, cream sauce and lastly, a layer of cheese. Put into a moderate oven and cook one hour or until nicely browned.

CREAM SAUCE FOR ABOVE

Beef drippings or pork fat,	Salt, $1\frac{1}{2}$ ozs.
7 ozs.	Pepper, $\frac{1}{4}$ oz.
Flour, 7 ozs.	Milk, 7 qts.

Put the drippings in a sauce pan on the range and when real *hot* add flour and cook until smooth; then add hot milk, pouring it all in at once, and stir quickly so as to avoid lumps; add seasoning and use as directed.

FOR CHEFS

RECIPE No. 27

HOMINY PUDDING, WITH CARAMEL SAUCE

Amounts for 100 persons

Hominy, 6 qts.	Sugar, $3\frac{1}{4}$ lbs.
Milk, 10 qts.	Salt, 3 ozs.
Currants (dried) or seedless	Cinnamon, 2 ozs.
rasins, $2\frac{1}{2}$ lbs.	Water, 14 qts.

Cook the hominy slowly in the water three hours. Then, having heated the milk, thin the hominy with it and add the sugar, cinnamon, salt and currants. Put into pans and bake $1\frac{1}{2}$ hours in a moderate oven.

Hominy pudding may be used as a dessert for dinner. It is rather hearty and forms a substantial part of the meal in which it is served.

CARAMEL SAUCE FOR HOMINY PUDDING

Sugar, $2\frac{1}{2}$ lbs.	Cornstarch, 10 level table-
Milk, 10 qts.	spoonfuls.
Nutmegs, grated, $1\frac{1}{2}$.	Salt, 2 level teaspoonfuls.

Having put aside two cups of the cold milk with which to blend the cornstarch, bring the rest to a boil in a double boiler.

Cook the sugar alone in a frying pan until it is of a golden brown color. Then add to the sugar one quart of boiling water and stir until smooth. Now blend the cornstarch with a cupful of cold milk and add it to the boiling milk until it thickens and then add the caramel (the browned sugar and water) and two level teaspoons of salt. Stir well and serve.

This sauce may be used with plain boiled rice, making a very good dessert.

Modifications.—In one hospital in which this recipe has been tried the quantities were found sufficient for about 125 persons. The hominy after cooking slowly for 3 hours was so hard that it was difficult to get a smooth mixture with the milk and it was found preferable either to boil the hominy about half an hour and then turn off the steam and allow it to cook very slowly indeed, or to add part of the milk after the hominy has been partly cooked.

The quantity of nutmeg in the caramel sauce was found too large; the nutmeg flavor covered up that of the caramel.

FOR CHEFS

RECIPE No. 28

RICE PUDDING

Amounts for 100 persons

Milk, 18 qts.	Cassia, 1 oz.
Sugar, 2½ lbs.	Salt, 3 ozs.
Rice, 3 lbs.	

Wash the rice and put equal portions into three pans, then add one-third of the sugar, one-third of the cassia and one-third of the salt to each pan. Now pour 6 quarts of the milk into each pan and stir well. Cook in a moderate oven 3 hours.

Serve hot or cold.

FOR CHEFS

RECIPE No. 29

CORN PUDDING

Amounts for 100 persons

Canned corn, 8 cans.	Salt, 4 ozs.
Milk, 8 qts.	Pepper, 4 teaspoonfuls.
Eggs, 8.	Butter, ½ lb.
Dry bread crumbs, 8 cupfuls.	

Soak bread crumbs in milk for one-half hour, add beaten eggs, pepper, salt and corn. Melt the butter and add to the mixture; stir well, and bake one hour or until a knife plunged into the pudding comes out clean.

FOR CHEFS

RECIPE No. 30

DUTCH APPLECAKE

Amounts for 100 persons

Flour, 5 qts.	Eggs, 10.
Milk, skimmed if to be had, 2½ qts.	Salt, 5 teaspoonfuls.
Beef drippings, 1¼ lbs.	Cinnamon, 2½ ozs.
Sugar, 2½ lbs.	Baking powder, 5 ozs.
	Apples, fresh, ¾ bushels.

Beat the sugar and eggs together, and add the milk. Sift the salt and baking powder into the flour and add it to the milk and sugar, beating thoroughly. Melt the dripping and add it to this batter, beating very hard in order that it may be well mixed. Pour it into pans for baking.

Having pared and sliced the apples, arrange the pieces in a regular layer on top of the batter in the pans. Over them sprinkle 4 tablespoonfuls of sugar and 4 of cinnamon. Put into a hot oven and bake 45 minutes.

This recipe gives an appetizing and inexpensive dessert when apples are plentiful. The use of beef dripping instead of butter lowers the cost.

FOR CHEFS

RECIPE No. 31

BREAD PUDDING

Amounts for 100 persons

Milk, 25 qts.	Cassia, 2 ozs.
Sugar, 5 lbs.	Salt, 3 ozs.
Bread, 12½ lbs.	Eggs, 25.

Soak bread for two hours in the milk, then mash the bread fine and add the sugar, cassia, salt and the well beaten eggs. Mix well and turn into greased pans or dishes and bake one hour in a moderate oven.

This and the three following puddings are simple variations of the ordinary bread pudding, and when a little thought and care is devoted to their preparation they become very much more palatable and attractive dishes than are ordinarily served under the name. They are hearty, nutritious and cheap, and should be added to a dinner which is not rich in protein. When such valuable dishes can be made from what would otherwise be wasted, it seems important that the bread should be carefully looked after. The recipes are given separately so that there may be no mistake made in the variations and each pudding may be distinctive. The bread crusts from Recipe No. 25 (page 185) can be used as part of the bread.

Modifications.—At one of the hospitals the above quantities were found sufficient for 200 persons. The cassia was replaced by sufficient vanilla to flavor.

FOR CHEFS

RECIPE No. 32

COCOANUT PUDDING

Amounts for 100 persons

Milk, 25 qts.	Salt, 3 ozs.
Sugar, 5 lbs.	Eggs, 25.
Bread, 12½ lbs.	Shredded cocoanut, 3 lbs.
Cassia, 2 ozs.	

Soak bread for two hours in the milk, then mash the bread fine and add the sugar, cassia, salt and cocoanut, and lastly the well beaten eggs. Mix well and turn into greased pans or dishes and bake one hour in a moderate oven.

FOR CHEFS

RECIPE No. 33

CHOCOLATE PUDDING

Amounts for 100 persons

Milk, 25 qts.	Cassia, 1 oz.
Bread, 12½ pounds.	Eggs, 25.
Sugar, 5¾ lbs.	Salt, 3 ozs.
Chocolate, ¾ lb.	

Soak the bread for two hours in the milk. Grate chocolate and put in a sauce pan with three-quarters of a pound of the

sugar and one-half pint of boiling water. Heat and stir until smooth and glossy, then add it to the bread and milk. Now add the remainder of the sugar and the cassia, mash until smooth, and lastly add the well beaten eggs. Mix well, turn into greased pans or dishes, and bake one hour in a moderate oven.

Modifications.—In one hospital the quantities suggested above were found sufficient for 200 persons when the quantity of chocolate was doubled.

FOR CHEFS

RECIPE No. 34

SPICED PUDDING

Amounts for 100 persons

Milk, 25 qts.	Cassia, 1 oz.
Bread, 12½ lbs.	Allspice, ½ oz.
Sugar, 4 lbs.	Cloves, ¼ oz.
Molasses, 1 qt.	Nutmeg, 1.
Eggs, 25.	Salt, 3 ozs.

Soak the bread in the milk two hours. Mix the spices with the sugar and add to the bread. Then mash the bread fine, add the molasses and the eggs thoroughly beaten, stir well and pour into greased pans. Bake for one hour. To make the pudding more attractive 2 pounds of currants or seedless raisins may be added to this recipe, but it is very good without.

FOR CHEFS

RECIPE No. 35

PRUNE SAUCE

Amounts for 100 persons

Prunes, 8 lbs.	Water, 8 qts.
Sugar, 1 lb.	

Wash the prunes twice, each time in 4 gallons of cold water, being sure that they are clean and free from sand. Then put them into 8 quarts of cold water to soak over night. In the morning add the sugar and set them on the stove to cook in the water in which they have soaked over night. Let them simmer for three hours. Serve for supper.

FOR CHEFS

RECIPE No. 36

PIE CRUST (OF BEEF DRIPPING)

Amounts for 100 persons

Beef drippings, 4½ lbs.	Salt, 3 ozs.
Flour (pastry), 6 lbs.	Sugar, 6 ozs.

Rub the dripping into the flour, and add the salt and sugar; mix the dry ingredients well and make into a stiff dough with cold (ice) water. Fold and roll three or four times. This amount will be sufficient for 24 pies.

Modifications.—One of the hospitals reports that the amount of pie crust made from this recipe is insufficient to make double crust pies for 100 persons.

FOR CHEFS

RECIPE No. 37

SALAD DRESSING WITHOUT EGGS OR OIL

Amounts for 100 persons

Butter, 6 ozs.	Red pepper, ⅓ tablespoonful.
Beef drippings, 6 ozs.	Vinegar, 1 pint.
Flour, 4 ozs.	Milk, 1½ qts.
Salt, 2 tablespoonfuls.	Sugar, 3 tablespoonfuls.
Mustard, 1 tablespoonful.	Water, 2 qts.

Heat the butter, drippings and flour together, and add them to the water, which should be boiling. Cook slowly for one hour.

Blend the mustard with a little of the vinegar; add the salt, sugar and pepper to this, and mix with the rest of the vinegar. Then add this to the cooked flour and fat mixture. Heat well, mix thoroughly and set away to cool. When quite cold add the milk, which must have been scalded and cooled. Mix again thoroughly, when it will be ready for use.

This dressing is good for cabbage or potato salad.

APPENDIX

The appendix to the second report on dietaries of hospitals for the insane in the state of New York, printed in the tenth annual report of the State Commission in Lunacy, gave detailed data of 40 studies of dietaries of patients and employees in the Brooklyn Department of the Long Island State Hospital and in the St. Lawrence State Hospital. Herewith are the details of 16 further studies of food consumption of patients and employees in the King's Park Department of the Long Island State Hospital and the Willard State Hospital. Summarized results of these 16 and the previous 40 dietary studies have been given in the body of this report.

LIST OF THE DIETARY STUDIES

The 56 dietary studies have been grouped in series each of which includes those studies, in the different hospitals, which were conducted in the same building or group of buildings at or about the same time. Twelve series were made, of which six comprised repeated studies, i. e., studies made with the same group of patients or employees and practically the same individuals as a previous study.

Among the patients the sexes were fed in different dining rooms and the food consumption of each sex could readily be observed; but the male and female employees ate at the same table and their food consumption could not well be kept separate.

The number of persons included in each of the different studies varied from 18 to 587, the total number in all studies being nearly 4200. The majority of these were included in two series of studies between which an interval of from a week to several months elapsed.

The following list of the studies shows the grouping into series, the number of studies included in each series, and the number and character of the persons studied.

LIST OF DIETARY STUDIES, 1898-9

*A. Long Island State Hospital. Brooklyn Department**First Series. Dec. 14-20, 1898.*

- Dietary Study No. 1. Male patients, workers, 96.
- " " No. 2. Female patients, workers, 113.
- " " No. 3. Male patients, infirm, 49.
- " " No. 4. Female patients, infirm, 50.

Second Series. Jan. 9-15, 1899. Repetition of first series.

- Dietary Study No. 5. Male patients, workers, 96.
- " " No. 6. Female patients, workers, 117.
- " " No. 7. Male patients, infirm, 45.
- " " No. 8. Female patients, infirm, 50.

*B. St. Lawrence State Hospital**Third Series. Infirmary Group. March 3-9, 1899.*

- Dietary Study No. 9. Employees: males 15, females 25; total, 40.
- " " No. 10. Male patients, workers, 60.
- " " No. 11. Male patients, infirm, 86.
- " " No. 12. Female patients, infirm, 99.

Fourth Series. Group III. March 13-19, 1899.

- Dietary Study No. 13. Employees: male 22, female 39; total, 61.
- " " No. 14. Male patients, chronic, restless, mostly non-workers, 129.
- " " No. 15. Female patients, chronic, restless, mostly non-workers, 224.

Fifth Series. Central Group. March 27-April 2, 1899.

- Dietary Study No. 16. Employees: male 60, female 78; total, 138.
- " " No. 17. Male patients, recent admissions, 32 to 33.
- " " No. 18. Male patients, acute and chronic, 18.
- " " No. 19. Male patients, chronic, active workers, 104.
- " " No. 20. Male patients, acute and chronic, 166.
- " " No. 21. Female patients, recent admissions, 49.
- " " No. 22. Female patients, acute and sick chronic, 18.
- " " No. 23. Female patients, chronic, active and disturbed, 86.
- " " No. 24. Female patients, chronic, 148.

Sixth Series. Infirmary Group. April 12-18, 1899. Repetition of third series.

- Dietary Study No. 25. Employees: male 14, female 25; total, 39.
- " " No. 26. Male patients, workers, 60.
- " " No. 27. Male patients, infirm, 87.
- " " No. 28. Female patients, infirm, 99.

Seventh Series. Central Group. July 7-13, 1899. Repetition of fifth series.

Dietary Study	No. 29.	Employees: male 60, female 78; total, 138.
"	"	No. 30. Male patients, recent admissions, 36 to 37.
"	"	No. 31. Male patients, acute and sick chronic, 17.
"	"	No. 32. Male patients, chronic, active workers, 108.
"	"	No. 33. Male patients, acute and chronic, 152 to 153.
"	"	No. 34. Female patients, recent admissions, 51.
"	"	No. 35. Female patients, acute and sick chronic, 21.
"	"	No. 36. Female patients, chronic, active and disturbed, 86 to 87.
"	"	No. 37. Female patients, chronic, 155.

Eighth Series. Group III. July 21-27, 1899. Repetition of fourth series.

Dietary Study	No. 38.	Employees: male 22, female 41; total, 63.
"	"	No. 39. Male patients, chronic, restless, mostly non-workers, 129.
"	"	No. 40. Female patients, chronic, restless, mostly non-workers, 224.

C. Willard State Hospital

Ninth Series. Jan.-March, 1899.

Dietary Study	No. 41.	Male patients, quiet demented non-workers, 288.
"	"	No. 42. Male patients, quiet demented workers, 284.
"	"	No. 43. Female patients, quiet demented workers, 271.
"	"	No. 44. Female patients, quiet demented non-workers, 275.

Tenth Series. April, 1899.

Dietary Study	No. 45.	Male patients, quiet demented non-workers, 280.
"	"	No. 46. Male patients, quiet demented workers, 278.

D. Long Island State Hospital. Kings Park Department

Eleventh Series. Feb., 1900.

Dietary Study	No. 47.	Chronic male patients, workers, 215.
"	"	No. 48. Chronic female patients, light workers, 520.
"	"	No. 49. Male patients in hospital ward, 110.
"	"	No. 50. Female patients in hospital ward, 150.
"	"	No. 51. Attendants, 111.

Twelfth Series. July, 1900.

Dietary Study	No. 52.	Chronic male patients, workers, 294.
"	"	No. 53. Chronic female patients, light workers, 587.
"	"	No. 54. Male patients in hospital ward, 124.
"	"	No. 55. Female patients in hospital ward, 183.
"	"	No. 56. Attendants, male and female, 104.

METHODS EMPLOYED IN MAKING DIETARY STUDIES

The usual method of conducting dietary studies of individuals or families involves the weighing of all food on hand at the beginning, received during, and on hand at the close of the study. The amounts of the different food materials on hand at the beginning, received during, and on hand at the close of the study; those of corresponding materials on hand at the close are subtracted; the remainders are the quantities used. The nutrients in the raw materials are computed from the results of actual analyses of samples taken during the study or from figures for the average composition of such materials. The waste from the table and kitchen is collected, in accurate experiments, and the nutrients determined by analysis or assumed from the amounts and composition of the materials wasted. The difference between the amounts of nutrients in the food used during the study and those in the waste represents the amounts eaten. An accurate census of the number, age, sex and occupation of the persons fed is also kept during the time of the study.

This method of making a dietary study, however, is not applicable in hospitals for the insane, since in these it is the aim to determine the food consumption of different classes of patients, whose food is prepared in central kitchens, together with that for other groups of patients and for employees. It is thus impracticable to weigh the raw food materials served to any given class of patients, and the composition of cooked foods varies so much with different methods of preparation and cooking and different proportions of raw ingredients that their composition can seldom be safely assumed. Accordingly material modifications of the customary methods have been necessary in the dietary studies in the New York hospitals.

Methods employed in the studies here reported.—To conduct a dietary study in a large kitchen and determine the quantities of nutrients in the food sent to each of a number of classes of patients requires considerable labor. The studies involve the determinations of the weights of all raw food materials brought

into the kitchen either from the general storehouse or from the vegetable cellars, and of the bread which is baked in the kitchen. Inasmuch as the food, as sent to the different dining-rooms, is cooked and its percentage composition is uncertain the weights of all the raw ingredients entering into the preparation of cooked foods, such as stews, hash, puddings, etc., must be determined as well as the weight of the final cooked product. This requires at least one person in the kitchen to weigh the total amounts of raw and cooked food materials prepared for the whole number of patients served from that kitchen.

Knowing the weight of raw ingredients used and the weight of the cooked product, the composition of a given cooked material may be computed, and if we know the amount served to a given class of patients we may calculate the corresponding amounts of nutrients. It is necessary, therefore, that the cooked food sent to the different dining rooms or classes of patients be weighed and the weights recorded in such manner that we may know just how much of each material a certain class of patients had for a given meal or day or week.

This involves much labor at meal time, the more because of the importance of promptness in serving the meals. It was found possible, by employing several persons, to make all the necessary weighings so rapidly as to cause no delay.

In order to determine the actual quantities of nutrients eaten the table waste must be taken into account. The waste from the different cooked foods is kept separate and weighed, and the nutrients thus wasted are computed in the same way as those in the corresponding food served. Food returned unserved, and in condition to be utilized, is weighed and the amounts deducted from the corresponding amount sent to the dining room.

The results of a given study or group of studies thus comprise statistics of the total weight of each kind of raw food material entering the kitchen during a certain period; the weights of the raw ingredients used in the preparation of each cooked dish and the total weight after cooking; the amount of each cooked food

sent from the kitchen to a given dining room or class of patients; the amount returned unserved; and the amount of the different cooked foods wasted at the table by the different classes of patients. An accurate census of the number of persons of each class at each meal is also kept.

From these data it is possible to compute the quantities of nutrients and energy, per person per day in the food served, rejected and eaten in the different dietary studies. The computations are, however, tedious and time consuming.

Computing the composition of cooked foods.—Cooked foods may be grouped, for convenience, into three classes. The first group will include such materials as meats, which lose in weight during cooking, through loss of water or water and fat. The second class will include such dishes as cooked oatmeal, rice, hominy, etc., in which the only change in composition is that due to the addition of water in cooking, so that the relative proportion of nutrients is not changed, although the amount in a given weight of the cooked food is much less than in the same weight of the raw material. The third class of prepared dishes includes those made up of a considerable number of raw ingredients. Thus beef stew may contain beef, potatoes, onions, carrots, parsnips, etc.; and puddings may be made of flour, dripping or lard, sugar, eggs, etc.

In order to illustrate the method of computing the composition of the cooked food in the three classes just referred to we may take a few typical examples.

During the dietary study at Kings Park in July, 1900, there was brought into the kitchen in a certain instance a lot of raw meat, weighing, with bones, 200 pounds. After boiling the meat weighed $132\frac{1}{2}$ pounds, of which $42\frac{1}{4}$ pounds was bone and $90\frac{1}{4}$ pounds cooked meat. Assuming that the bone did not change weight in boiling (an assumption which may be incorrect) and subtracting its weight from that of the raw meat, including bone, we have $(200 - 42\frac{1}{4}) = 157\frac{3}{4}$ pounds of raw meat free from bone. The composition of this, as assumed from tables of average composition, was 17.5 per cent. protein and 18.6 per cent.

fat. There would, therefore, be $(157.75 \times 17.5 =)$ 27.6 pounds of protein and $(157.75 \times 18.6 =)$ 29.3 pounds of fat in the raw meat. Of the fat $5\frac{1}{2}$ cooked out and was removed for drippings, or used for soap grease, leaving 23.8 pounds of fat in the meat. The weight of the cooked meat without bone was $(132\frac{1}{2} - 42\frac{1}{4} =)$ $90\frac{1}{4}$ pounds and contained, we assume, the 27.6 pounds of protein and $(29.3 - 5.5 =)$ 23.8 pounds of fat present in the uncooked meat. The percentage composition of the cooked meat is obtained by dividing the weight of protein and of fat in this by the weight of the cooked meat itself and amounts to $(27.6 \div 90.25 =)$ 30.6 per cent. protein and $(23.8 \div 90.25 =)$ 26.4 per cent. fat.

In computing the composition of materials which have nothing but water added in their preparation, we have simply to take into account the weight and composition of the raw material and the weight of the cooked product. Thus in one instance $80\frac{1}{2}$ pounds of raw oatmeal made $440\frac{1}{2}$ pounds of cooked product. The raw oatmeal, according to figures for average percentage composition, contained 13.5 pounds of protein, 5.9 pounds of fat and 53.3 pounds of carbohydrates, all of which must be assumed as present in the $440\frac{1}{2}$ pounds of cooked oatmeal, so that the percentages of protein, fats and carbohydrates are found by dividing the weights of each by the total weight of the cooked dish, and amount to $(13.5 \div 440.5 =)$ 3.1, $(5.9 \div 440.5 =)$ 1.3 and $(53.3 \div 440.5 =)$ 12.1 per cent. respectively.

The third class of cooked dishes comprises those which contain several raw ingredients. For example, a bread pudding which when cooked weighed 281 pounds and was made up of $55\frac{1}{4}$ pounds of bread, $9\frac{1}{2}$ pounds of bread crusts, 15 pounds of raisins, 6 pounds of currants, $25\frac{1}{4}$ pounds condensed milk, $\frac{1}{2}$ pound of butter, $13\frac{1}{4}$ pounds of sugar and the remainder water. Assuming the average composition of the raw ingredients, this pudding furnished 8.9 pounds of protein, 4 pounds of fat and 76.9 pounds of carbohydrates, corresponding to 3.2, 1.4 and 27.4 per cent. respectively of the 281 pounds of cooked pudding.

COMPOSITION OF FOOD MATERIALS

Table 1 beyond gives the figures used for estimating the amounts of nutrients contained in the foods consumed during the several dietary studies. As in the previous studies the foods were weighed in the cooked condition and there is more or less uncertainty regarding their percentage composition. The proportions of nutrients in raw food materials can be estimated with a fair degree of accuracy from averages or analyses of similar materials. To learn the composition of cooked foods, on the other hand, requires either special analyses, which would be costly and time-consuming, or statistics of the kinds and amounts of the different raw food materials used in their preparation and the weight of the cooked product. The figures for the average composition of the raw materials were taken from Bul. 28, revised, of the U. S. Dept. Agr., Office of Experiment Stations, Chemical Composition of American Food Materials.

In the following description of the cooked food materials the abbreviation "e. p." refers to the edible portion of any given material, while "a. p." refers to the material as purchased, including refuse such as bone, tendon, shell, skin, seeds, etc. The weight of the raw material either "as purchased" or the "edible portion" is stated, together with the assumed percentage composition. The term protein is abbreviated to "prot." and carbohydrate to "carb". Following the figures for assumed percentage composition of the raw material is given the weight of the cooked product, and in the case of some meats the quantity of fat which was cooked out and was not eaten with the meat, but was used either in cooking or for the making of soap. The computed percentage composition of the cooked food materials used in the dietary studies is shown in Table 1.

DESCRIPTION OF FOOD MATERIALS AND WASTE FOOD MATERIALS

No. 1. *Boiled Beef*.—Raw, a. p., 200 lbs.; raw, e. p. (prot., 17.5%; fat, 18.6%), 157.75 lbs.; cooked, e. p., 90.25 lbs.; fat cooked out, 5.5 lbs.

No. 2. *Boiled Beef*.—Raw, a. p., 244.5 lbs.; raw, e. p. (prot., 18.5%; fat, 20.4%), 177.75 lbs.; cooked, e. p., 126.75 lbs.; fat cooked out, 6 lbs.

No. 3. Roast Beef.—Average of three samples, a, b and c.

a. Average of two samples (1) and (2). Used 62.5 lbs.

1. Raw, a. p., 77.5 lbs.; raw, e. p. (prot., 18.5%; fat, 18.0%), 61.73 lbs.; cooked, e. p., 37.23 lbs.; fat cooked out, 3 lbs.

2. Raw, a. p., 122.5 lbs.; raw, e. p. (prot., 17.8%; fat, 22.0%), 100 lbs.; cooked, e. p., 62.5 lbs.; fat cooked out, 8 lbs.

b. Raw, a. p., 154 lbs.; raw, e. p. (prot., 17.5%; fat, 23.6%), 126 lbs.; cooked, e. p., 94.75 lbs.; fat cooked out, 9.75 lbs. Used, 41.5 lbs.

c. Raw, a. p., 78 lbs.; raw, e. p. (prot., 17.3%; fat, 23.8%), 67 lbs.; cooked, e. p., 44.75 lbs.; fat cooked out, 9.5 lbs. Used, 59.5 lbs.

No. 4. Roast Beef.—Average of four samples, a, b, c and d.

a. No. 3a. Used, 1.5 lbs.

b. Raw, a. p., 73 lbs.; raw, e. p. (prot., 17.5%; fat, 23.6%), 53.5 lbs.; cooked, e. p., 24 lbs.; fat cooked out, 6 lbs. Used, 1.5 lbs.

c. No. 3b. Used, 2.5 lbs.

d. No. 3c. Used, 7 lbs.

No. 5. Roast Beef.—Average of four samples, a, b, c and d.

a. No. 3a. Used, 1.5 lbs.

b. No. 4b. Used, 2 lbs.

c. No. 3b. Used, 3.5 lbs.

d. No. 3c. Used, 4.25 lbs.

No. 6. Roast Beef.—Average of four samples, a, b, c and d.

a. No. 3a. Used, 29.5 lbs.

b. No. 4b. Used, 16 lbs.

c. No. 3b. Used, 43 lbs.

d. No. 3c. Used, 35.5 lbs.

No. 7. Roast Beef.—Average of four samples, a, b, c and d.

a. Assumed from average for the week (prot., 26.8%; fat, 23.5%). Used, 95.25 lbs.

b. Raw, a. p., 209.75 lbs.; raw, e. p. (prot., 19.6%; fat, 11.9%), 176.75 lbs.; cooked, e. p., 125.75 lbs. Used, 117.25.

c. Raw, a. p., 199 lbs.; raw, e. p. (prot., 17.7%; fat, 20.2%), 161.25 lbs. + 75 lbs.; cooked, e. p., 150.5 lbs.; fat cooked out, 6.5 lbs. Used, 101.25 lbs.

d. Raw, a. p., 95.25 lbs.; raw, e. p. (prot., 19.6%; fat, 11.3%), 77.25 lbs.; cooked, e. p., 54.50. Used, 53.25 lbs.

No. 8. Roast Beef.—Average of two samples, a and b.

a. No. 7a. Used, 1.25 lbs.

b. No. 7c. Used, 7.75 lbs.

No. 9. Roast Beef.—Average of four samples, a, b, c and d.

a. No. 7a. Used, 3 lbs.

b. No. 7b. Used, 6.5 lbs.

c. No. 7c. Used, 2.25 lbs.

d. No. 7d. Used, 2.5 lbs.

No. 10. *Roast Beef*.—Average of four samples, a, b, c and d.

- a. No. 7a. Used, 33.75 lbs.
- b. No. 7b. Used, 9 lbs.
- c. No. 7c. Used, 5.25 lbs.
- d. No. 7d. Used, 2.5 lbs.

No. 11. *Roast Beef*.—Average of six samples, a, b, c, d, e and f.

- a. No. 7a. Used, 38 lbs.
- b. No. 7b. Used, 40.5 lbs.
- c. Raw, a. p., 59 lbs.; raw, e. p. (prot., 19.6%; fat, 11.3%), 49.58 lbs.; cooked, e. p., 32.58 lbs.; fat cooked out, 2.5 lbs.
- d. No. 7c. Used, 18.5 lbs.
- e. Raw, a. p., 57 lbs.; raw, e. p. (prot., 17.5%; fat, 26.6%), 47.03 lbs.; cooked, e. p., 34.03 lbs. Used, 17 lbs.
- f. Raw, a. p., 65.5 lbs.; raw, e. p. (prot., 17.4%; fat, 25.5%), 59.5 lbs.; cooked, e. p., 43.5 lbs. Used, 16.5 lbs.

No. 16. *Steak*.—Raw, a. p. (prot., 20.3%; fat, 13.6%), 81.5 lbs.; cooked, a. p., 73 lbs.

No. 17. *Steak*.—Raw, a. p. (prot., 19.0%; fat, 12.8%), 59.75 lbs.; lard, 0.33 lb.; butter, 0.67 lb.; cooked, 59.75 lbs.

No. 18. *Steak*.—Average of two samples, a and b.

- a. No. 17. Used, 4.5 lbs.
- b. Raw, a. p. (prot., 16.1%; fat, 17.5%), 21.5 lbs.; cooked, a. p., 20.25 lbs. Used, 12 lbs.

No. 19. *Hamburg Steak*.—Raw, e. p. (prot., 20.3%; fat, 13.6%), 67 lbs.; cooked, e. p., 47.75 lbs.

No. 21. *Liver*.—Raw, a. p. (prot., 20.7%; fat, 4.5%; carbohydrates, 1.5%), 52.5 lbs.; cooked, 43.75 lbs.

No. 26. *Roast Mutton*.—Raw, a. p., 146.5 lbs.; raw, e. p. (prot., 16.6%; fat, 27.6%), 127.5 lbs.; cooked, e. p., 63 lbs.; fat cooked out, 8.5 lbs.

No. 27. *Roast Mutton*.—Raw, a. p., 75 lbs.; raw, e. p. (prot., 18.5%; fat, 18.0%), 51 lbs.; cooked, e. p., 21.5 lbs.

No. 28. *Mutton Chops*.—Raw, a. p. (prot., 13.5%; fat, 28.3%), 11.75 lbs.; cooked, a. p., 8.25 lbs.

No. 29. *Scalloped Mutton*.—Raw, a. p. (prot., 16.5%; fat, 29.1%), 59.25 lbs.; cooked, a. p., 45.5 lbs.; bread, 13 lbs.; butter, 0.5 lb.; cooked, 47.5 lbs.

No. 34. *Ham*.—Raw, e. p. (prot., 16.3%; fat, 38.8%), 81 lbs.; cooked, e. p., 60.5 lbs.; fat cooked out, 1.5 lbs.

No. 35. *Ham*.—Average of three samples, a, b and c.

- a. Raw, e. p. (prot., 16.3%; fat, 38.8%), 16 lbs.; cooked, e. p., 9.25 lbs.; fat cooked out, 2.75 lbs. Used, 1.5 lbs.
- b. Raw, e. p. (prot., 16.3%; fat, 38.8%), 68 lbs.; cooked, e. p., 50 lbs.; fat cooked out, 11.25 lbs. Used, 1.25 lbs.
- c. Average of a and b. Used, 5.25 lbs.

No. 36. *Ham*.—Average of two samples, a and b.

- a. No. 35a. Used, 3 lbs.
- b. No. 35b. Used, 5.5 lbs.

No. 37. *Ham*.—Average of two samples, a and b.

a. No. 35a. Used, 4 lbs.

b. No. 35b. Used, 3 lbs.

No. 38. *Ham*.—Average of two samples, a and b.

a. No. 35a. Used, 2.25 lbs.

b. No. 35b. Used, 4.75 lbs.

No. 39. *Ham*.—Average of two samples, a and b.

a. No. 35a. Used, 16.75 lbs.

b. No. 35b. Used, 20 lbs.

No. 42. *Boiled Salt Pork*.—Raw, a. p., 146 lbs.; raw, e. p. (prot., 1.9%; fat, 86.2%), 142 lbs.; cooked, e. p., 125.5 lbs.; fat cooked out, 5 lbs.

No. 43. *Boiled Salt Pork, Fried*.—Average of two samples, a and b.

a. No. 42. Used, 39 lbs.

b. Raw, e. p. (prot., 1.9%; fat, 86.2%), 22.25 lbs.; cooked, e. p., 11.5 lbs.; fat cooked out, 8.5 lbs.

No. 46. *Baked Haddock*.—Raw, a. p., 345.25 lbs.; raw, e. p. (prot., 17.24; fat, 0.3%), 310.25 lbs.; lard, 4.5 lbs.; beef drippings, 5.5 lbs.; cooked e. p., 299.75 lbs.

No. 47. *Boiled Mackerel*.—Raw, e. p. (prot., 18.7%; fat, 7.1%), 262 lbs.; cooked, e. p., 242 lbs.

No. 48. *Boiled Mackerel*.—Raw, e. p. (prot., 18.7%; fat, 7.1%), 76 lbs.; cooked, e. p., 69.5 lbs.

No. 53. *Boiled Herring (Pickled)*.—Raw, a. p., 163 lbs.; raw, e. p. (prot., 19.5%; fat, 7.1%), 132.25 lbs.; cooked, e. p., 142.5 lbs.

No. 54. *Boiled Herring (Salt)*.—Raw, e. p. (prot., 17.3%; fat, 26.4%), 164.75 lbs.; cooked, e. p., 93.75 lbs.

No. 55. *Codfish Balls*.—Salt cod, raw, e. p. (prot., 25.4%; fat, 0.3%), 9.75 lbs.; eggs, 2.5 lbs.; potatoes, 36.5 lbs.; butter, 1 lb.; lard, 6.75 lbs.; flour, 2.5 lbs.; cooked, 35.75 lbs.

No. 56. *Creamed Cod*.—Salt cod, raw, e. p. (prot., 25.4%; fat, 0.3%), 114.5 lbs.; condensed milk, 17 lbs.; flour, 13.25 lbs.; cooked, 168.5 lbs.

No. 57. *Bean Soup*.—Beans, 48.5 lbs.; pork, 22.75 lbs.; flour, 4 lbs.; bread, 19.5 lbs.; cooked cabbage, 12.5 lbs.; cooked potatoes, 6 lbs.; cooked, 606.5 lbs.

No. 58. *Meat Soup*.—Beef, raw, e. p. (prot., 17.5%; fat, 18.6%), 75.71 lbs.; bread, 17 lbs.; rice, 8 lbs.; cooked, 770 lbs.; fat cooked out, 12 lbs.

No. 59. *Meat Soup*.—Beef, raw, e. p. (prot., 18.9%; fat, 21.0%), 60.10 lbs.; beef, raw, e. p. (prot., 16.5%; fat, 29.1%), 67.65 lbs.; cooked rice, 56.5 lbs.; cooked meat (prot., 21.8%; fat, 17.3%), 26 lbs.; scalloped mutton, 14.5 lbs.; flour and water (mixed) (prot., 3.9%; fat, 0.3%; carb., 25.6%), 31.5 lbs.; cooked, 548.5 lbs.

No. 60. *Pea Soup*.—Split peas, 150 lbs.; cooked, 1,075 lbs.

No. 60. *Pea Soup*.—Split peas, 145 lbs.; fried ham, 12.5 lbs.; salt pork, 40 lbs.; cooked hominy, 34.5 lbs.; cooked macaroni, 24.5 lbs.; cooked cabbage, 6 lbs.; flour, 8.25 lbs.; fat, 4 lbs.; cooked, 784.5 lbs.

No. 62. *Vegetable Soup*.—No. 66. Used, 194 lbs.; bread, 19.75 lbs.; cooked, 728 lbs.

No. 63. *Vegetable Soup*.—Average of two samples, a and b.

- a. Beef, raw, e. p. (prot., 17.5%; fat, 18.6%), 69.66 lbs.; rice, 12.5 lbs.; bread, 15 lbs.; cooked, 603.5 lbs. Used, 368 lbs.
- b. No. 62. Used, 401 lbs.

No. 64. *Vegetable Soup*.—Average of two samples, a and b.

- a. No. 62. Used, 66.75 lbs.
- b. No. 63a. Used, 69 lbs.

No. 65. *Vegetable Soup*.—Average of two samples, a and b.

- a. No. 62. Used, 124.75 lbs.
- b. No. 63a. Used, 158.5 lbs.

No. 66. *Vegetable Soup*.—Cooked meat (prot., 30.9%; fat, 32.6%), 50.5 lbs.; beans, 38 lbs.; turnip, 21.32 lbs.; cabbage, 12 lbs.; rice, 20.5 lbs.; cooked, 272.5 lbs.

No. 67. *Meat Stew*.—Beef, raw, e. p. (prot., 17.5%; fat, 18.6%), 83.45 lbs.; flour, 7 lbs.; rice, 12 lbs.; cooked, 175 lbs.; fat cooked out, 13 lbs.

No. 68. *Meat Stew*.—Beef, raw, e. p. (prot., 18.9%; fat, 21.0%), 148.92 lbs.; beef, raw, e. p. (prot., 16.5%; fat, 29.1%), 182.99 lbs.; potatoes, 23 lbs.; cooked hominy, 24.5 lbs.; cooked oatmeal, 2 lbs.; old stew (prot., 6.0%; fat, 8.0%; carb., 9.5%), 30.5 lbs.; rice, 21.5 lbs.; flour, 19.5 lbs.; cooked, 755.5 lbs.; fat cooked out, 35.5 lbs.

No. 69. *Beef Stew*.—Beef, raw, e. p. (prot., 17.5%; fat, 18.6%), 87.49 lbs.; flour, 6.5 lbs.; cooked, 80.5 lbs.; fat cooked out, 6 lbs.

No. 70. *Meat Hash*.—Canned corned beef, 82 lbs.; cooked potatoes, 53.5 lbs.; condensed milk, 10 lbs.; cooked, 163.5 lbs.

No. 71. *Meat Hash*.—Average of two samples, a and b.

- a. Canned corned beef, 149 lbs.; potatoes, 97.5 lbs.; condensed milk, 16 lbs.; cooked, 299.5 lbs. Used, 160 lbs.
- b. Canned corned beef, 135 lbs.; cooked potatoes, 54 lbs.; condensed milk, 11.25 lbs.; cooked, 236 lbs. Used, 178 lbs.

No. 72. *Meat Hash*.—Average of three samples, a, b and c.

- a. No. 71a. Used, 47 lbs.
- b. No. 71b. Used, 19 lbs.
- c. No. 70. Used, 12.5 lbs.

No. 73. *Meat Hash*.—Average of three samples, a, b and c.

- a. No. 71a. Used, 66.5 lbs.
- b. No. 71b. Used, 36.5 lbs.
- c. No. 70. Used, 14 lbs.

No. 74. *Meat Hash*.—Beef, raw, e. p. (prot., 19.6%; fat, 11.9%), 105.5 lbs.; potatoes, 120 lbs.; condensed milk, 17.5 lbs.; lard, 1.5 lbs.; cooked, 179.25 lbs.

No. 75. *Gravy*.—Stock; flour, 4 lbs.; cooked, 42 lbs.

No. 76. *Gravy*.—Average of three samples, a, b and c.

- a. Stock; flour, 3.5 lbs.; cooked, 29.25 lbs. Used, 15.5 lbs.
- b. Stock; flour, 4.5 lbs.; cooked, 39 lbs. Used, 19.5 lbs.
- c. Stock; flour and water mixture (prot., 3.9%; fat, 0.3%; carb., 25.6%), 15.5 lbs.; cooked, 32 lbs. Used, 14.5 lbs.

- No. 77. *Gravy*.—Average of four samples, a, b, c and d.
a. No. 76a. Used, 13.75 lbs.
b. No. 76b. Used, 19.5 lbs.
c. Stock; flour, 1.75 lbs.; butter, 1 lb.; cooked, 15.75 lbs. Used, 15.75 lbs.
d. No. 76c. Used, 17.5 lbs.
- No. 85. *Scrambled Eggs*.—Eggs, 27.5 lbs.; milk, 21.5 lbs.; butter, 1.25 lbs.; cooked, 40.5 lbs.
- No. 86. *Scrambled Eggs*.—Average of two samples, a and b.
a. Eggs, 20.75 lbs.; butter, 2.25 lbs.; milk, 27.5 lbs.; cooked, 32.25 lbs. Used, 3.25 lbs.
b. Eggs, 35.25 lbs.; milk, 3.75 lbs.; butter, 1 lb.; cooked, 39 lbs. Used, 2.75 lbs.
- No. 87. *Scrambled Eggs*.—Average of two samples, a and b.
a. No. 86a. Used, 20.75 lbs.
b. No. 86b. Used, 39 lbs.
- No. 88. *Fried Eggs*.—Eggs, 27.75 lbs.; lard, 1.25 lbs.; butter, 1.25 lbs.; cooked, 27.13 lbs.
- No. 93. *Oatmeal*.—Average of three samples, a, b and c.
a. Oatmeal, 77 lbs.; cooked, 472.25 lbs. Used, 99 lbs.
b. Oatmeal, 81 lbs.; cooked, 460.25 lbs. Used, 105.75 lbs.
c. Oatmeal, 78.5 lbs.; cooked, 439 lbs. Used, 104 lbs.
- No. 94. *Oatmeal*.—Average of three samples, a, b and c.
a. No. 93a. Used, 191.25 lbs.
b. No. 93b. Used, 191.5 lbs.
c. No. 93c. Used, 179 lbs.
- No. 95. *Oatmeal*.—Oatmeal, 80.5 lbs.; cooked, 440.5 lbs.
- No. 97. *Corn Meal Mush*.—Corn meal, 77 lbs.; cooked, 492.25 lbs.
- No. 98. *Corn Meal Mush*.—Average of two samples, a and b.
a. No. 97. Used, 190.25 lbs.
b. Corn meal, 41 lbs.; cooked, 230.25 lbs. Used, 157.25 lbs.
- No. 99. *Corn Meal Mush*.—Average of two samples, a and b.
a. No. 97. Used, 51.5 lbs.
b. No. 98b. Used, 16.75 lbs.
- No. 100. *Corn Meal Mush*.—Average of two samples, a and b.
a. No. 97. Used, 57.25 lbs.
b. No. 98b. Used, 38 lbs.
- No. 101. *Corn Meal Mush*.—Corn meal, 20 lbs.; cooked, 145 lbs.
- No. 102. *Corn Meal Mush*.—Average of two samples, a and b.
a. No. 101. Used, 4.5 lbs.
b. Corn meal, 30.25 lbs.; cooked, 249.75 lbs. Used, 142.5 lbs.
- No. 105. *Farina*.—Farina, 72 lbs.; cooked, 439 lbs.
- No. 106. *Farina*.—Farina, 81 lbs.; cooked, 435.5 lbs.

- No. 108. *Hominy*.—Average of two samples, a and b.
a. Hominy, 93.5 lbs.; cooked, 497 lbs. Used, 108.5 lbs.
b. Hominy, 76 lbs.; cooked, 446 lbs. Used, 88.5 lbs.
a. No. 108a. Used, 181 lbs.
b. No. 108b. Used, 178.5 lbs.
- No. 110. *Hominy*.—Average of two samples, a and b.
a. No. 108a. Used, 27 lbs.
b. No. 108b. Used, 27.5 lbs.
- No. 111. *Hominy*.—Average of five samples, a, b, c, d and e.
a. Hominy, 80 lbs.; cooked, 506.25 lbs. Used, 98 lbs.
b. Hominy, 80.25 lbs.; cooked, 468.25 lbs. Used, 100.5 lbs.
c. Hominy, 80 lbs.; cooked, 440 lbs. Used, 96.5 lbs.
d. Hominy, 80 lbs.; cooked, 478.25 lbs. Used, 104 lbs.
e. Hominy, 74 lbs.; cooked, 467.5 lbs. Used, 87.25 lbs.
- No. 109. *Hominy*.—Average of two samples, a and b.
- No. 112. *Hominy*.—Average of five samples, a, b, c, d and e.
a. No. 111a. Used, 51.25 lbs.
b. No. 111b. Used, 46 lbs.
c. No. 111c. Used, 41.5 lbs.
d. No. 111d. Used, 39 lbs.
e. No. 111e. Used, 145.5 lbs.
- No. 113. *Hominy*.—Average of five samples, a, b, c, d and e.
a. No. 111a. Used, 32.5 lbs.
b. No. 111b. Used, 27 lbs.
c. No. 111c. Used, 26.75 lbs.
d. No. 111d. Used, 22.75 lbs.
e. No. 111e. Used, 34.5 lbs.
- No. 127. *Corn Bread*.—Average of two samples, a and b.
a. Corn meal, 31 lbs.; flour, 25.5 lbs.; butter, 3.75 lbs.; sugar, 9.75 lbs.; eggs, 6.75 lbs.; condensed milk, 16.5 lbs.; cooked, 106.25 lbs. Used, 59.25 lbs.
b. Corn meal, 27 lbs.; flour, 18.5 lbs.; butter, 1.75 lbs.; sugar, 5 lbs.; eggs, 6 lbs.; condensed milk, 7.62 lbs.; cooked, 75.5 lbs. Used, 65.5 lbs.
- No. 129. *Boiled Rice*.—Rice, 69 lbs.; cooked, 384.5 lbs.
- No. 130. *Boiled Rice*.—Average of five samples, a, b, c, d and e.
a. Rice, 72.75 lbs.; cooked, 359.75 lbs. Used, 88 lbs.
b. Rice, 75.5 lbs.; cooked, 349.5 lbs. Used, 80 lbs.
c. Rice, 72.5 lbs.; cooked, 306.5 lbs. Used, 86.25 lbs.
d. Rice, 79.5 lbs.; cooked, 481.5 lbs. Used, 142 lbs.
e. Rice, 74.75 lbs.; cooked, 434.25 lbs. Used, 86.75 lbs.
- No. 131. *Boiled Rice*.—Average of five samples, a, b, c, d and e.
a. No. 130a. Used, 101 lbs.
b. No. 130b. Used, 156.5 lbs.
c. No. 130c. Used, 98.25 lbs.
d. No. 130d. Used, 203.75 lbs.
e. No. 130e. Used, 191.75 lbs.

No. 132. *Boiled Rice*.—Average of five samples, a, b, c, d and e.

- a. No. 130a. Used, 48.75 lbs.
- b. No. 130b. Used, 29.5 lbs.
- c. No. 130c. Used, 42.5 lbs.
- d. No. 130d. Used, 40.5 lbs.
- e. No. 130e. Used, 47 lbs.

No. 133. *Boiled Rice*.—Average of five samples, a, b, c, d and e.

- a. No. 130a. Used, 43.5 lbs.
- b. No. 130b. Used, 41.0 lbs.
- c. No. 130c. Used, 37.75 lbs.
- d. No. 130d. Used, 36 lbs.
- e. No. 130e. Used, 53.75 lbs.

No. 134. *Bread Pudding*.—Bread, 55.25 lbs.; bread crusts,¹ 9.5 lbs.; raisins, 15 lbs.; currants, 6 lbs.; condensed milk, 25.5 lbs.; butter, 0.5 lbs.; sugar, 13.25 lbs.; cooked, 281 lbs.

No. 135. *Custard Pudding*.—Milk, 30 lbs.; eggs, 5 lbs.; butter, 0.13 lbs.; sugar, 3.5 lbs.; cooked, 38.5 lbs.

No. 136. *Tapioca Pudding*.—Tapioca, 50.5 lbs.; milk, 37.25 lbs.; sugar, 15 lbs.; cooked, 292.5 lbs.

No. 137. *Ginger or Molasses Cake*.—Eggs, 13.32 lbs.; molasses, 72 lbs.; flour, 108 lbs.; butter, 14 lbs.; sugar, 14 lbs.; cooked, 237 lbs.

No. 138. *Ginger Cake*.—Flour, 108 lbs.; molasses, 64 lbs.; eggs, 11 lbs.; sugar, 15 lbs.; butter, 7 lbs.; lard, 8 lbs.; cooked, 268 lbs.

No. 139. *Peach Pie*.—Peaches, 4.5 lbs.; flour, 3.5 lbs.; lard, 1.5 lbs.; butter, 1.0 lbs.; sugar, 2 lbs.; cooked, 13.58 lbs.

No. 140. *Apple Sauce*.—Green apples, 205 lbs.; sugar, 26 lbs.; cooked, 187.5 lbs.

No. 141. *Dried Peach Sauce*.—Dried peaches, 75.5 lbs.; cooked, 320.75 lbs.

No. 142. *Dried Peach Sauce*.—Average of two samples, a and b.

- a. No. 141. Used, 42 lbs.
- b. Dried peaches, 25.5 lbs.; cooked, 48.5 lbs. Used, 17.75 lbs.

No. 143. *Dried Peach Sauce*.—Average of two samples, a and b.

- a. No. 141. Used, 34.5 lbs.
- b. No. 142b. Used, 24.25 lbs.

No. 144. *Dried Peach Sauce*.—Average of two samples, a and b.

- a. No. 141. Used, 44.25 lbs.
- b. No. 142b. Used, 24.25 lbs.

No. 145. *Prune Sauce*.—Average of two samples, a and b.

- a. Prunes, 127.5 lbs.; cooked, 285.25 lbs. Used, 91 lbs.
- b. Prunes, 128 lbs.; cooked, 266 lbs.; cooked prunes (prot., 0.9%; carbohydrates, 32.8%), 20 lbs. Used, 69 lbs.

No. 146. *Prune Sauce*.—Average of two samples, a and b.

- a. No. 145a. Used, 92 lbs.
- b. No. 145b. Used, 150 lbs.

¹ Composition assumed the same as that of dry toast.

- No. 147. *Prune Sauce*.—Average of two samples, a and b.
a. No. 145a. Used, 22.25 lbs.
b. No. 145b. Used, 29.25 lbs.
- No. 148. *Prune Sauce*.—Average of two samples, a and b.
a. No. 145a. Used, 33 lbs.
b. No. 145b. Used, 19 lbs.
- No. 153. *Baked Beans*.—Average of three samples, a, b and c.
a. Beans, 149.5 lbs.; cooked, 382 lbs. Used, 81.5 lbs.
b. Beans, 104.5 lbs.; cooked, 234 lbs. Used, 112 lbs.
c. Beans, 139.5 lbs.; lard, 8.5 lbs.; beef fat, 12 lbs.; cooked, 376 lbs. Used, 88 lbs.
- No. 154. *Baked Beans*.—Average of two samples, a and b.
a. No. 153a. Used, 154 lbs.
b. No. 153c. Used, 147.5 lbs.
- No. 155. *Baked Beans*.—Average of two samples, a and b.
a. No. 153a. Used, 34 lbs.
b. No. 153c. Used, 35.5 lbs.
- No. 156. *Baked Beans*.—Average of three samples, a, b and c.
a. No. 153a. Used, 39 lbs.
b. No. 153b. Used, 24.5 lbs.
c. No. 153c. Used, 37.5 lbs.
- No. 157. *Baked Beans*.—Average of three samples, a, b and c.
a. No. 153a. Used, 27 lbs.
b. No. 153b. Used, 32.5 lbs.
c. No. 153c. Used, 23 lbs.
- No. 158. *Baked Beans*.—Beans, 150 lbs.; ham ends,¹ 11.5 lbs.; cooked ham (prot., 22.2%; fat, 30.3%), 11.5 lbs.; cooked, 426 lbs.
- No. 160. *Beets*.—Beets, a. p., 11 lbs.; cooked, e. p., 7.5 lbs.
- No. 162. *Cabbage*.—Average of four samples, a, b, c and d.
a. Cabbage, 455 lbs.; cooked, 386 lbs. Used, 92.5 lbs.
b. Cabbage, 537.5 lbs.; cooked, 409 lbs. Used, 118.25 lbs.
c. Cabbage, 591 lbs.; cooked, 397.5 lbs. Used, 139 lbs.
d. Cabbage, 433.5 lbs.; cooked, 391 lbs. Used, 121.5 lbs.
- No. 163. *Cabbage*.—Average of four samples, a, b, c and d.
a. No. 162a. Used, 45.5 lbs.
b. No. 162b. Used, 36.5 lbs.
c. No. 162c. Used, 38.5 lbs.
d. No. 162d. Used, 46.5 lbs.
- No. 164. *Cabbage*.—Average of four samples, a, b, c and d.
a. No. 162a. Used, 30 lbs.
b. No. 162b. Used, 27 lbs.
c. No. 162c. Used, 26.5 lbs.
d. No. 162d. Used, 22.5 lbs.

¹ Analysis assumed the same as that of medium fat bacon.

- No. 165. *Cabbage*.—Average of four samples, a, b, c and d.
- a. No. 162. Used, 37.5 lbs.
 - b. No. 162b. Used, 26 lbs.
 - c. No. 162c. Used, 27.5 lbs.
 - d. No. 162 d. Used, 23 lbs.
- No. 166. *Cabbage*.—Average of four samples, a, b, c and d.
- a. Cabbage, 532.25 lbs.; cooked, 498 lbs. Used, 104 lbs.
 - b. Cabbage, 174 lbs.; cooked, 143.5 lbs. Used, 87.5 lbs.
 - c. Cabbage, 394.25 lbs.; cooked, 259.5 lbs. Used, 69 lbs.
 - d. Cabbage, 444 lbs.; cooked, 354.5 lbs. Used, 100.25 lbs.
- No. 167. *Cabbage*.—Average of four samples, a, b, c and d.
- a. No. 166a. Used, 204.5 lbs.
 - b. No. 166c. Used, 105 lbs.
 - c. No. 166d. Used, 138 lbs.
 - d. Cabbage, 258.5 lbs.; cooked, 194.75 lbs. Used, 137.5 lbs.
- No. 168. *Cabbage*.—Average of three samples, a, b and c.
- a. No. 166a. Used, 74.75 lbs.
 - b. No. 166c. Used, 24 lbs.
 - c. No. 166d. Used, 32.5 lbs.
- No. 169. *Cabbage*.—Average of three samples, a, b and c.
- a. No. 166a. Used, 57.25 lbs.
 - b. No. 166c. Used, 24 lbs.
 - c. No. 166d. Used, 33.5 lbs.
- No. 170. *Cabbage*.—Averages of five samples, a, b, c, d and e.
- a. No. 166a. Used, 35.5 lbs.
 - b. No. 166b. Used, 43.75 lbs.
 - c. No. 166c. Used, 37.5 lbs.
 - d. No. 166d. Used, 32.25 lbs.
 - e. No. 167d. Used, 18.25 lbs.
- No. 179. *Potatoes*.—Average of six samples, a, b, c, d, e and f.
- a. Cooked potatoes,¹ 39 lbs.; butter, 1.25 lbs.; cooked, 38.5 lbs.
Used, 38.5 lbs.
 - b. Cooked potatoes,¹ 43 lbs.; butter, 1 lb.; cooked, 43.5 lbs.
Used, 31.5 lbs.
 - c. Cooked potatoes,¹ 56 lbs.; milk, 10.75 lbs.; butter, 1.5 lbs.;
cooked, (mashed), 68.25 lbs. Used, 57 lbs.
 - d. Cooked potatoes,¹ 33 lbs.; butter, 0.75 lbs.; cooked, 33 lbs.
Used, 19.5 lbs.
 - e. Cooked potatoes,¹ 40.5 lbs.; butter, 1 lb.; cooked, 36.25 lbs.
Used, 33.5 lbs.
 - f. Cooked potatoes,¹ 317.5 lbs.
- No. 180. *Potatoes*.—Average of two samples, a and b.
- a. Boiled potatoes, 57 lbs.
 - b. Fried potatoes.—Raw, e. p., 21.5 lbs.; lard, 14.25 lbs.; fat,
4.5 lbs.; cooked, 30.25 lbs.

¹ Composition assumed.

- No. 182. *Tomatoes*.—Canned tomatoes, 53.5 lbs.; cooked, 47 lbs.
- No. 184. *Turnips*.—Average of two samples, a and b.
a. Turnips, 348 lbs.; cooked, 250 lbs. Used, 72.25 lbs.
b. Turnips, 329 lbs.; cooked, 259.75 lbs. Used, 45 lbs.
- No. 185. *Turnips*.—Average of three samples, a, b and c.
a. No. 184a. Used, 119 lbs.
b. No. 184b. Used, 110.5 lbs.
c. Turnips, 335 lbs. cooked, 267.75 lbs. Used, 110 lbs.
- No. 186. *Turnips*.—Average of three samples, a, b and c.
a. No. 184a. Used, 22 lbs.
b. No. 184b. Used, 21 lbs.
c. No. 185c. Used, 47 lbs.
- No. 187. *Turnips*.—Average of three samples, a, b and c.
a. No. 184a. Used, 36.5 lbs.
b. No. 184b. Used, 37 lbs.
c. No. 185c. Used, 59.25 lbs.
- No. 188. *Turnips*.—Average of two samples, a and b.
a. Cooked turnips, No. 184b., 41.75 lbs.; butter, 1.25 lbs.; cooked, 43 lbs. Used, 41.75 lbs.
b. Cooked turnips, No. 185c., 42.25 lbs.; butter, 1.75 lbs.; cooked, 44 lbs. Used, 31.5 lbs.
- No. 189. *Turnips*.—Average of three samples, a, b and c.
a. Turnips, 301.5 lbs.; cooked, 289 lbs. Used, 8.5 lbs.
b. Turnips, 220.5 lbs.; cooked, 210 lbs. Used, 30 lbs.
c. Turnips, 274.5 lbs.; cooked, 258 lbs. Used, 19 lbs.
- No. 190. *Macaroni and Cheese*.—Macaroni, 72 lbs.; cooked, 297.75 lbs.; used, 257.25 lbs.; cheese, 10.75 lbs.; condensed milk, 28.5 lbs.; cooked, 297 lbs.
- No. 191. *Macaroni and Cheese*.—Cooked macaroni, 40.5 lbs.; cheese, 2.25 lbs.; butter, 1.75 lbs.; milk, 10.5 lbs.; cooked, 53.5 lbs.
- No. 192. *Macaroni and Cheese*.—Macaroni, 74.25 lbs.; cheese, 34 lbs.; fat, 1 lb.; cooked, 288.25 lbs.
- No. 193. *Turnip Sauce*.—Flour, 7 lbs.; condensed milk, 14.75 lbs.; cooked, 127.5 lbs.

Waste.

- No. 199. *Roast Beef*.—Average of two samples, a and b.
a. No. 3b. Amount, 4 lbs.
b. No. 3c. Amount, 3 lbs.
- No. 200. *Roast Beef*.—No. 2a.
- No. 201. *Roast Beef*.—Average of two samples, a and b.
a. No. 2a. Amount, 1 lb.
b. No. 3b. Amount, 1 lb.
- No. 202. *Roast Beef*.—Average of two samples, a and b.
a. No. 2a. Amount, 3 lbs.
b. No. 4b. Amount, 2 lbs.

- No. 203. *Roast Beef*.—Average of four samples, a, b, c and d.
a. No. 7a. Amount, 20.25 lbs.
b. No. 7b. Amount, 30.25 lbs.
c. No. 7c. Amount, 2.5 lbs.
d. No. 7d. Amount, 1.25 lbs.
- No. 204. *Roast Beef*.—Average of two samples, a and b.
a. No. 7a. Amount, 0.5 lb.
b. No. 7d. Amount, 1.25 lbs.
- No. 205. *Roast Beef*.—Average of five samples, a, b, c, d and e.
a. No. 7a. Amount, 8.25 lbs.
b. No. 7b. Amount, 6.25 lbs.
c. No. 7c. Amount, 5.5 lbs.
d. No. 11e. Amount, 3.5 lbs.
e. No. 11f. Amount, 2.75 lbs.
- No. 206. *Ham*.—No. 35b.
- No. 207. *Boiled Salt Pork*.—No. 42.
- No. 208. *Vegetable Soup*.—Average of two samples, a and b.
a. No. 63a. Amount, 19.75 lbs.
b. No. 62. Amount, 23.5 lbs.
- No. 209. *Scrambled Eggs*.—No. 86a.
- No. 210. *Meat Hash*.—Average of two samples, a and b.
a. No. 71a. Amount, 14.75 lbs.
b. No. 71b. Amount, 7 lbs.
- No. 211. *Meat Hash*.—No. 71a.
- No. 212. *Meat Hash*.—Average of two samples, a and b.
a. No. 71a. Amount, 13 lbs.
b. No. 71b. Amount, 24 lbs.
- No. 213. *Oatmeal*.—Average of three samples, a, b and c.
a. No. 93a. Amount, 3 lbs.
b. No. 93b. Amount, 8.75 lbs.
c. No. 93c. Amount, 9.5 lbs.
- No. 214. *Oatmeal*.—Average of three samples, a, b and c.
a. No. 93a. Amount, 7 lbs.
b. No. 93b. Amount, 5.75 lbs.
c. No. 93c. Amount, 6.25 lbs.
- No. 215. *Oatmeal*.—No. 93c.
- No. 216. *Oatmeal*.—Average of two samples, a and b.
a. No. 93a. Amount, 3 lbs.
b. No. 93c. Amount, 3 lbs.
- No. 217. *Oatmeal*.—Average of three samples, a, b and c.
a. No. 93a. Amount, 11.5 lbs.
b. No. 93b. Amount, 8 lbs.
c. No. 93c. Amount, 16 lbs.
- No. 218. *Cornmeal Mush*.—No. 97.
- No. 219. *Cornmeal Mush*.—Average of two samples, a and b.
a. No. 97. Amount, 5.5 lbs.
b. No. 98b. Amount, 3 lbs.

- No. 220. *Cornmeal Mush*.—Average of two samples, a and b.
a. No. 97. Amount, 4 lbs.
b. No. 98b. Amount, 1.5 lbs.
- No. 221. *Cornmeal Mush*.—Average of two samples, a and b.
a. No. 101. Amount, 2 lbs.
b. No. 102b. Amount, 7 lbs.
- No. 222. *Hominy*.—Average of two samples, a and b.
a. No. 108a. Amount, 10.5 lbs.
b. No. 108b. Amount, 10.5 lbs.
- No. 223. *Hominy*.—Average of two samples, a and b.
a. No. 108a. Amount, 4 lbs.
b. No. 108b. Amount, 8.5 lbs.
- No. 224. *Hominy*.—No. 108b.
- No. 225. *Hominy*.—Average of two samples, a and b.
a. No. 108a. Amount, 28.5 lbs.
b. No. 108b. Amount, 33.5 lbs.
- No. 226. *Hominy*.—Average of four samples, a, b, c and d.
a. No. 111a. Amount, 6.25 lbs.
b. No. 111b. Amount, 10 lbs.
c. No. 111c. Amount, 4.5 lbs.
d. No. 111d. Amount, 5 lbs.
- No. 227. *Hominy*.—Average of five samples, a, b, c, d and e.
a. No. 111a. Amount, 9.75 lbs.
b. No. 111b. Amount, 23.5 lbs.
c. No. 111c. Amount, 6 lbs.
d. No. 111d. Amount, 9.25 lbs.
e. No. 111e. Amount, 16.5 lbs.
- No. 228. *Hominy*.—Average of four samples, a, b, c and d.
a. No. 111a. Amount, 5 lbs.
b. No. 111b. Amount, 5.5 lbs.
c. No. 111c. Amount, 9.25 lbs.
d. No. 111d. Amount, 2.25 lbs.
- No. 229. *Hominy*.—Average of four samples, a, b, c and d.
a. No. 111a. Amount, 2.5 lbs.
b. No. 111b. Amount, 3.25 lbs.
c. No. 111c. Amount, 6.5 lbs.
d. No. 111e. Amount, 9 lbs.
- No. 230. *Corn Bread*.—No. 127a.
- No. 231. *Corn Bread*.—No. 127b.
- No. 232. *Boiled Rice*.—Average of two samples, a and b.
a. No. 130a. Amount, 1 lb.
b. No. 130b. Amount, 11 lbs.
- No. 233. *Boiled Rice*.—Average of five samples, a, b, c, d and e.
a. No. 130a. Amount, 0.75 lbs.
b. No. 130b. Amount, 2.5 lbs.
c. No. 130c. Amount, 7.75 lbs.
d. No. 130d. Amount, 8 lbs.
e. No. 130e. Amount, 1.75 lbs.

- No. 234. *Boiled Rice*.—Average of two samples, a and b.
a. No. 130a. Amount, 15.5 lbs.
b. No. 130c. Amount, 3 lbs.
- No. 235. *Boiled Rice*.—Average of two samples, a and b.
a. No. 130c. Amount, 1 lb.
b. No. 130d. Amount, 5.25 lbs.
- No. 236. *Boiled Rice*.—Average of four samples, a, b, c and d.
a. No. 130a. Amount, 8 lbs.
b. No. 130b. Amount, 2 lbs.
c. No. 130c. Amount, 3.25 lbs.
d. No. 130e. Amount, 4 lbs.
- No. 237. *Dried Peach Sauce*.—No. 141.
- No. 238. *Prune Sauce*.—Average of two samples, a and b.
a. No. 145a. Amount, 3.5 lbs.
b. No. 145b. Amount, 1.25 lbs.
- No. 239. *Prune Sauce*.—No. 145a.
- No. 240. *Prune Sauce*.—Average of two samples, a and b.
a. No. 145a. Amount, 1.5 lbs.
b. No. 145b. Amount, 1.25 lbs.
- No. 241. *Prune Sauce*.—No. 145b.
- No. 242. *Baked Beans*.—Average of three samples, a, b and c.
a. No. 153a. Amount, 2.5 lbs.
b. No. 153b. Amount, 2.5 lbs.
c. No. 153c. Amount, 10.5 lbs.
- No. 243. *Baked Beans*.—Average of two samples, a and b.
a. No. 153a. Amount, 3.5 lbs.
b. No. 153c. Amount, 4.75 lbs.
- No. 244. *Baked Beans*.—No. 153a.
- No. 245. *Cabbage*.—Average of three samples, a, b and c.
a. No. 162b. Amount, 29 lbs.
b. No. 162c. Amount, 8.25 lbs.
c. No. 162d. Amount, 10 lbs.
- No. 246. *Cabbage*.—Average of three samples, a, b and c.
a. No. 162b. Amount, 4.5 lbs.
b. No. 162c. Amount, 11 lbs.
c. No. 162d. Amount, 1.5 lbs.
- No. 247. *Cabbage*.—No. 162a.
- No. 248. *Cabbage*.—Average of three samples, a, b and c.
a. No. 162a. Amount, 3.5 lbs.
b. No. 162b. Amount, 0.5 lbs.
c. No. 162c. Amount, 4 lbs.
- No. 249. *Cabbage*.—Average of two samples, a and b.
a. No. 162a. Amount, 13.5 lbs.
b. No. 162d. Amount, 13 lbs.

- No. 250. *Cabbage*.—Average of four samples, a, b, c and d.
- a. No. 166a. Amount, 7.5 lbs.
 - b. No. 166b. Amount, 5.5 lbs.
 - c. No. 166c. Amount, 4.75 lbs.
 - d. No. 166d. Amount, 1.75 lbs.
- No. 251. *Cabbage*.—Average of four samples, a, b, c and d.
- a. No. 166a. Amount, 6 lbs.
 - b. No. 166c. Amount, 11.75 lbs.
 - c. No. 166d. Amount, 10.75 lbs.
 - d. No. 167d. Amount, 8.25 lbs.
- No. 252. *Cabbage*.—No. 166a.
- No. 253. *Cabbage*.—Average of two samples, a and b.
- a. No. 166a. Amount, 9.75 lbs.
 - b. No. 166d. Amount, 4.5 lbs.
- No. 254. *Cabbage*.—Average of four samples, a, b, c and d.
- a. No. 166b. Amount, 3.25 lbs.
 - b. No. 166c. Amount, 5.75 lbs.
 - c. No. 166d. Amount, 5.5 lbs.
 - d. No. 167d. Amount, 2.75 lbs.
- No. 255. *Fried Potatoes*.—No. 180b.
- No. 256. *Turnips*.—No. 184a.
- No. 257. *Turnips*.—Average of two samples, a and b.
- a. No. 184a. Amount, 5 lbs.
 - b. No. 184b. Amount, 5.5 lbs.
- No. 258. *Turnips*.—Average of two samples, a and b.
- a. No. 184b. Amount, 22.5 lbs.
 - b. No. 188b. Amount, 10 lbs.

TABLE 1

Estimates for percentages of nutrients in food materials, mostly cooked, and in waste, as used in the calculations of the following dietaries

MATERIALS		Dietaries in which the material was used	Reference number	Protein	Fat	Carbo- hydrates
				Per cent	Per cent	Per cent
FOODS						
<i>Beef:</i>						
Boiled.....	47, 49-51.....	1	30.6	26.4	.....
“.....	52, 54-56.....	2	25.9	23.9	.....
Roast.....	47.....	3	26.5	19.1	.....
“.....	49.....	4	27.4	18.2	.....
“.....	50.....	5	27.9	19.8	.....
“.....	51.....	6	27.5	20.3	.....
“.....	52.....	7	27.4	21.3	.....
“.....	53.....	8	27.6	26.8	.....
“.....	54.....	9	27.5	21.1	.....
“.....	55.....	10	27.8	22.9	.....
“.....	56.....	11	27.2	22.1	.....
Neck.....	41.....	12	13.9	11.9	.....
Round (b).....	46.....	13	19.0	12.8	.....
Side (b).....	42-46.....	14	14.8	18.1	.....
Steak (b).....	43.....	15	19.0	12.8	.....
“.....	49-51.....	16	22.7	15.2	.....
“.....	52, 54-56.....	17	19.0	14.3	.....
“.....	53.....	18	17.6	17.5	.....
“ hamburger.....	52-56.....	19	28.5	19.1	.....
Liver (b).....	44.....	20	20.7	4.5	1.5	

"	49-51	21	24.8	5.4	1.8
Corned (b)	43	22	14.3	23.8	.....
" canned (b)	41, 44-46, 56	23	26.3	18.7	.....
"	42, 43	24	28.5	15.2	.....
<i>Mutton:</i>					
Mutton (b)	41-43, 46	25	13.5	28.3	.....
" roast	47, 49-50	26	33.6	42.4	.....
"	51	27	43.9	42.7	.....
" chops	54, 55	28	19.3	14.4	.....
" scalloped	56	29	23.1	37.6	14.5
<i>Pork:</i>					
Ham, fresh (b)	41, 43, 44, 46	30	13.5	25.9	.....
Side (b)	42, 45	31	8.0	49.0	.....
Roast (a)	52, 54-56	32	17.7	67.8	.....
Ham, smoked	42	33	15.8	39.1	.....
" cooked	49, 51	34	21.8	49.5	.....
"	52	35	25.3	33.9	.....
"	53	36	24.4	32.8	.....
"	54	37	25.7	34.4	.....
"	55	38	24.0	32.6	.....
"	56	39	23.5	32.0	.....
Shoulder, smoked (b)	41, 43, 44, 46	40	13.0	26.6	.....
Salt (b)	43	41	8.4	67.1	.....
" boiled	47, 49, 50	42	2.2	93.6	.....
" and fried	51	43	2.5	93.4	.....
Lard (b)	41-46	44	.....	100.0	.....

(b) Composition assumed.

(a) Composition assumed from averages in previous studies, at St. Lawrence State Hospital.

TABLE 1—*Estimates for percentages of nutrients in food materials, etc.—(Continued)*

MATERIALS	Dieteries in which the material was used	Reference number	Protein	Fat	Carbo-hydrates
			Per cent	Per cent	Per cent
<i>Fish:</i>					
Bluefish (b)	46	45	10.0	0.6	.....
Haddock	47, 48, 50, 51	46	17.8	3.6	.....
Mackerel	52-55	47	20.2	7.7	.....
"	56	48	20.4	7.8	.....
Oysters (b)	44	49	6.0	1.3	33
Pickrel (b)	43	50	9.9	0.2	.....
Cod, salt (b)	41-43, 45	51	16.0	0.4	.....
Herring, pickled	43, 45	52	18.5	6.3	.....
" " cooked	47-51	53	18.1	6.6	.....
" " salt	52-55	54	30.4	46.4	.....
Codfish balls	52, 53, 56	55	11.0	22.3	24.1
Creamed cod	52-55	56	19.0	1.1	11.4
<i>Soups:</i>					
Bean	53-55	57	2.2	3.4	7.3
Meat	48-50	58	2.0	0.3	2.0
"	53-55	59	6.1	7.7	3.2
Pea	47-51	60	3.4	0.1	8.7
"	52-56	61	5.4	5.8	13.5
Vegetable	47	62	2.8	1.7	5.5
"	48	63	2.6	1.0	4.3
"	49	64	2.6	1.0	4.2
"	50	65	2.6	0.9	4.1
"	51	66	9.6	6.3	15.1

Stew:

Meat.....	47, 50, 51	67	8.8	1.5	3.9
"	52-56.....	68	8.6	6.9	5.6
Beef.....	51.....	69	19.9	12.8	6.1

Hash:

Meat	47, 51	70	14.6	10.0	7.5
"	48.....	71	15.2	10.5	5.9
"	49.....	72	14.8	10.2	6.4
"	50.....	73	14.9	10.3	6.3
"	53-55.....	74	13.8	8.7	17.6

Gravy

"	47.....	75	1.1	0.1	7.1
"	52.....	76	1.6	0.1	9.9
"	56.....	77	1.5	1.4	9.7

Dairy products:

Milk (b)	41-47, 49-56.....	78	3.3	4.0	5.0
Butter (b)	41-56.....	79	1.0	85.0	..
Cheese (b)	41-56.....	80	25.9	33.7	2.4
" pot (b)	47, 48, 52-56	81	20.9	1.0	4.3
Condensed milk (c)	47-56.....	82	11.4	15.3	14.1

Eggs:

Eggs	42, 44-46	83	13.1	9.3
" boiled (b)	47, 52-56	84	14.0	12.0	.....
" scrambled	51.....	85	11.8	11.9	2.7
"	52.....	86	13.0	14.2	2.5
"	56.....	87	13.2	13.5	1.8
" fried.....	56.....	88	15.2	19.2	.....

(b) Composition assumed.

(c) Composition assumed from unpublished analyses.

TABLE 1—*Estimates for percentages of nutrients in food materials, etc.*—(Continued)

MATERIALS	Dietsaries in which the material was used	Reference number	Protein	Fat	Carbo- hydrates
			Per cent	Per cent	Per cent
<i>Breakfast foods, etc.:</i>					
Oatmeal	41	89	16.3	7.1	67.4
“ (b)	44, 46	90	10.1	7.2	67.5
Oat flakes	41-43	91	15.8	7.1	68.1
“ (b)	45	92	16.7	7.3	66.2
Oatmeal, cooked	47, 49-51	93	2.8	1.3	11.7
“	48	94	2.8	1.3	11.6
“	52-56	95	3.1	1.3	12.1
Corn meal (b)	41, 42, 44, 46	96	9.2	1.9	75.4
“ mush	47, 51	97	1.4	0.3	11.8
“	48	98	1.5	0.3	12.5
“	49	99	1.5	0.3	12.2
“	50	100	1.5	0.3	12.4
“	52	101	1.3	0.3	10.4
“	53, 55	102	1.1	0.2	9.1
Farina	41, 43	103	11.0	1.2	75.9
“ (b)	44, 45	104	11.0	1.4	76.3
“ cooked	47-51	105	1.8	0.2	12.5
“	52-56	106	2.0	0.3	14.2
Hominy (b)	41-46	107	8.3	0.6	79.0
“ cooked	47	108	1.5	0.1	14.3
“	48, 50, 51	109	1.5	0.1	14.2
“	49	110	1.5	0.1	14.1
“	52-53, 55	111	1.4	0.1	13.2

TABLE 1—*Estimates for percentages of nutrients in food materials, etc.—(Continued)*

MATERIALS	Dietaries in which the material was used	Reference number	Protein	Fat	Carbo- hydrates
			Per cent	Per cent	Per cent
<i>Cakes:</i>					
Ginger or molasses.....	47-51.....	137	6.8	6.1	61.2
Ginger.....	52-56.....	138	5.8	6.0	52.4
Pie, peach.....	56.....	139	3.4	17.6	38.5
<i>Sauces:</i>					
Apple.....	52, 54-56.....	140	0.4	0.5	29.4
Peach, dried.....	52, 53.....	141	1.1	0.2	14.3
".....	54.....	142	1.5	0.3	19.8
".....	55.....	143	1.7	0.3	22.0
".....	56.....	144	1.6	0.3	20.9
Prune.....	47, 50.....	145	0.9	.....	33.8
".....	48.....	146	1.0	.....	34.2
".....	49.....	147	1.0	.....	34.1
".....	51.....	148	0.9	.....	33.6
<i>Sugars:</i>					
Molasses (b).....	41-46.....	149	2.4	.....	69.3
Sugar, granulated (b).....	41-56.....	150	.....	.....	100.0
Syrup (b).....	52, 53, 55, 56.....	151	.....	.....	70.0
<i>Vegetables:</i>					
Beans (b).....	41-46.....	152	22.5	1.8	59.6
" baked.....	47.....	153	9.1	2.4	24.2
".....	48.....	154	8.6	3.3	22.7

"	49	155	8.5	3.4	22.7
"	50	156	8.9	2.7	23.7
"	51	157	9.1	2.2	24.1
"	52-56	158	8.8	3.3	21.0
Beets (b).....	41-46	159	1.6	0.1	9.7
Beets, cooked	56	160	1.9	0.1	11.3
Cabbage, cooked	41-45	161	1.6	0.3	5.6
"	47	162	2.1	0.4	7.2
"	48, 50	163	2.0	0.4	7.1
"	49	164	2.1	0.4	7.1
"	51	165	2.0	0.9	7.1
"	52	166	1.9	0.4	6.8
"	53	167	2.0	0.4	6.8
"	54	168	1.9	0.3	6.5
"	55	169	1.9	0.3	6.6
"	56	170	2.0	0.4	6.9
Carrots	41, 43	171	1.1	0.3	9.2
Corn, green (b)	52-56	172	3.1	1.1	19.7
" canned (b)	46	173	2.8	1.2	19.0
Lettuce (b)	52, 53, 55, 56	174	1.2	0.3	2.9
Onions (b)	41, 42, 45, 46	175	1.6	0.3	9.9
Peas, canned	46	176	7.0	0.5	16.9
Potatoes (b)	41-46	177	2.2	0.1	18.4
" cooked (b)	47-50, 52	178	2.5	0.1	20.9
"	51	179	2.5	1.0	20.7
"	56	180	2.2	8.7	18.2
Tomatoes, canned (b)	42, 46	181	1.2	0.2	4.0
" " cooked	51	182	1.4	0.2	4.6
Turnips (b)	41-43, 45, 46	183	1.3	0.2	8.1
" cooked	47	184	1.7	0.3	10.9

(b) Composition assumed

TABLE 1—Estimates for percentages of nutrients in food materials, etc.—(Continued)

MATERIALS	Dieteries in which the material was used	Reference number	Protein	Fat	Carbo- hydrates
			Per cent	Per cent	Per cent
<i>Vegetables—(Continued):</i>					
Turnips, cooked	48.....	185	1.7	0.3	10.6
“	49.....	186	1.7	0.3	10.4
“	50.....	187	1.7	0.3	10.5
“	51.....	188	1.6	3.3	9.9
“	52-56.....	189	1.4	0.2	8.5
<i>Vegetable substitutes:</i>					
Macaroni and cheese	47-50.....	190	4.6	2.3	16.7
“	51.....	191	4.2	5.1	14.6
“	52-56.....	192	6.5	4.5	19.4
Turnip sauce.....	52-56.....	193	1.7	1.0	10.4
<i>Fruits:</i>					
Dried apples, (b)	41-44, 46.....	194	1.6	2.2	66.1
Bananas	43.....	195	1.3	0.7	23.2
“ (b)	51.....	196	1.3	0.6	22.0
Plums.....	41, 43, 44.....	197	2.1	.....	73.3
Prunes.....	41-45.....				
Raspberries	43, 45, 46.....	198	7.3	1.8	80.2
WASTE					
Roast beef.....	44.....	199	15.2	15.5	.....
“	47.....	200	24.4	18.1	.....
“	49.....	201	29.3	22.2	.....

"	"	50	202	26.0	21.5	.....
"	"	51	203	33.2	24.4	.....
"	"	52	204	27.3	19.7	.....
"	"	55	205	27.4	18.3	.....
"	"	56	206	26.5	25.6	.....
Ham	.....	56	207	22.2	30.3	.....
Pork, salt	.....	47, 51	208	2.2	93.6	.....
Soup, vegetable	.....	48	209	2.6	1.1	4.4
Eggs, scrambled	.....	56	210	12.4	16.1	4.3
Hash, meat	.....	48	211	14.9	10.3	6.2
"	"	49	212	14.3	9.8	6.6
"	"	50	213	15.5	10.7	5.8
Oatmeal	.....	47	214	2.9	1.3	11.9
"	"	48	215	2.7	1.3	11.6
"	"	49	216	2.9	1.3	12.1
"	"	50	217	2.8	1.3	11.5
"	"	51	218	2.8	1.3	11.9
Corn meal mush	.....	48	219	1.4	0.3	11.8
"	"	49	220	1.5	0.3	12.3
"	"	50	221	1.5	0.3	12.2
"	"	53	222	1.2	0.2	9.4
Hominy	.....	47, 48	223	1.5	0.1	14.2
"	"	49	224	1.5	0.1	14.0
"	"	50	225	1.4	0.1	13.5
"	"	51	226	1.5	0.1	14.1
"	"	52	227	1.4	0.1	13.4
"	"	53, 54	228	1.4	0.1	13.1
"	"	55	229	1.5	0.1	13.6
"	"	56	230	1.4	0.1	13.3
Corn bread	.....	47	231	7.9	5.9	50.9
"	"	51	232	8.3	4.7	53.1

TABLE 1—Estimates for percentages of nutrients in food materials, etc.—(Concluded)

MATERIALS		Dietaries in which the material was used	Reference number	Protein Per cent	Fat Per cent	Carbo- hydrates Per cent
WASTE—(Continued)						
Boiled rice.....	.....	52.....	233	1.7	0.1	17.0
“.....	.....	53.....	234	1.5	0.1	15.8
“.....	.....	54.....	235	1.7	0.1	16.4
“.....	.....	55.....	236	1.4	.....	13.9
“.....	.....	56.....	237	1.6	0.1	16.1
Peach sauce.....	.....	55, 56.....	238	1.1	0.2	14.3
Prune sauce.....	.....	47.....	239	0.8	.....	33.5
“.....	.....	48.....	240	0.9	.....	32.8
“.....	.....	50.....	241	0.9	.....	34.2
“.....	.....	51.....	242	1.0	.....	35.1
Beans.....	.....	47.....	243	8.7	4.4	23.1
“.....	.....	48.....	244	8.5	3.8	22.7
“.....	.....	50, 51.....	245	8.8	0.7	23.3
Cabbage.....	.....	47.....	246	2.1	0.4	7.3
“.....	.....	48.....	247	2.2	0.4	7.1
“.....	.....	49.....	248	1.9	0.4	6.6
“.....	.....	50.....	249	2.3	0.4	7.5
“.....	.....	51.....	250	1.8	1.7	6.3
“.....	.....	52.....	251	1.9	0.4	6.7
“.....	.....	53.....	252	2.0	0.4	7.1
“.....	.....	54.....	253	1.7	0.3	6.0
“.....	.....	55.....	254	1.8	0.3	6.4
“.....	.....	56.....	255	2.1	0.4	7.1
Potatoes, fried.....	.....	56.....	256	1.6	24.9	13.1
Turnips.....	.....	47.....	257	1.8	0.3	11.3
“.....	.....	50.....	258	1.7	0.3	10.8
“.....	.....	51.....	259	1.6	3.1	9.9
Wet waste.....	.....	41.....	260	10.5	1.0	75.4

DETAILS OF THE DIETARY STUDIES

In the following tables, 2 to 46, are given the details of dietary studies Nos. 41-55 inclusive. The corresponding details of studies 1-40 were given in the previous report, as stated on page 78. The first table of each dietary study shows the kinds and amounts of food used and the quantities of nutrients computed to have been furnished by each different food material or cooked dish. The total amounts of food used are stated in both pounds and kilograms, but the computed amounts of nutrients are stated in grams* according to the usual custom. The figures in the column "reference number" refer to the corresponding numbers in the first column of Table 1 and indicate the assumed percentage composition of the particular food.

The second table in each dietary study shows the kinds and amounts of food materials left on the table in such condition that they could not be served again. Kitchen waste was not determined.

The third table in each dietary study summarizes the results of the statistics given in the previous tables, showing the amount of nutrients and energy per person per day in the food served, rejected and eaten. The food materials have been divided into groups in order to show to a certain extent how the actual nutriment was divided among these different groups.

* 28.4 grams = one ounce, 454 grams = one pound.

TABLE 2

Food materials served in Dietary Study No. 41 of 288 male patients, quiet, demented, non-workers, at Willard State Hospital during week beginning Jan. 12, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT				
		Total food		NUTRIENTS		
				Protein	Fat	Carbo- hydrates
		Pounds	Kilograms	Grams	Grams	Grams
<i>Animal food</i>						
Beef, neck pieces	12	244.25	110.80	15,400	13,183	.....
" corned (canned)	23	14.00	6.35	1,670	1,187	.....
Mutton	25	6.00	2.72	367	770	.....
Pork, fresh	30	161.00	73.03	9,859	18,914	.....
" shoulder (smoked)	40	81.55	36.99	4,809	9,839	.....
Lard	44	25.55	11.59	.....	11,590	.....
Fish, cod (salt)	51	55.50	25.18	4,028	101	.....
Total meats.	.....	587.85	266.66	36,133	55,584	.....
<i>Dairy products</i>						
Butter	79	154.01	69.86	699	59,380	.....
Cheese	80	17.00	7.71	1,997	2,598	185
Milk	78	608.94	276.22	9,116	11,050	13,810
Total dairy products	.....	779.95	353.79	11,812	73,028	13,995
Total animal food	.....	1,367.80	620.45	47,945	128,612	13,995

Vegetable food

Hominy	107	15.00	6.80	564	41	5,372
Oatmeal.....	89	34.62	15.70	2,560	1,115	10,585
Oat flakes	91	15.00	6.80	1,075	483	4,631
Farina	103	57.41	26.04	2,865	313	19,765
Total breakfast foods .....	.....	122.03	55.34	7,064	1,952	40,353
Barley	118	13.66	6.20	576	62	4,808
Corn meal.....	96	15.92	7.22	664	137	5,445
Rice	120	39.69	18.00	1,440	54	14,223
Flour	115	1,614.38	732.28	76,890	7,323	552,100
Sugar, granulated	150	113.20	51.35	.....	.....	51,348
Molasses	149	101.21	45.91	1,102	.....	31,813
Total flours, sugars, etc. ....	.....	1,898.06	860.96	80,672	7,576	659,737
Potatoes.....	177	567.51	257.42	5,662	257	47,360
Beans.....	152	79.32	35.98	8,095	648	21,440
Beets	159	102.40	46.50	744	46	4,510
Cabbage	161	172.75	78.36	1,254	235	4,388
Carrots	171	10.09	4.58	50	14	421
Onions	175	16.17	7.34	117	22	726
Turnips	183	239.08	108.45	1,410	217	8,784
Total vegetables .....	.....	1,196.32	538.63	17,312	1,439	87,629

TABLE NO. 2—*Food materials served in Dietary Study No. 41, etc.—(Concluded)*

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food			NUTRIENTS		
		Pounds	Kilograms	Protein	Fat	Carbo-hydrates	
<i>Vegetable food—(Concluded)</i>							
Apples, dried.....	194	20.00	9.07	145	200	5,996	
Prunes.....	197	17.00	7.71	162	.....	5,652	
Plums.....	197	18.00	8.17	171	.....	5,984	
Total fruits.....	.....	55.00	24.95	478	200	17,632	
Total vegetable food.....	.....	3,262.41	1,479.88	105,546	11,167	805,351	
Total food.....	.....	4,630.21	2,100.33	153,491	139,779	819,346	

TABLE 3

Food materials rejected in Dietary Study No. 41 of 288 male patients, quiet, demented, non-workers, at Willard State Hospital during week beginning Jan. 12, 1899

KIND OF FOOD MATERIAL	WEIGHT					NUTRIENTS		
	Reference number	Total food		Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms					
<i>Animal food</i>								
Beef, all kinds	12	11.02	5.00	695	595	.....	
“ corned (canned)	23	2.20	1.00	263	187	.....	
Pork, fresh	30	7.60	3.45	466	893	.....	
“ shoulder (smoked)	40	18.85	8.55	1,112	2,275	.....	
Fish, cod (salt)	51	7.06	3.20	512	13	.....	
Total meats .....	.....	46.73	21.20	3,048	3,963	.....	
Butter	79	.06	.03	.....	24	.....	
Cheese	80	.26	.12	31	40	.....	
Total dairy products .....	.....	.32	.15	31	64	1
Total animal food ...	.....	47.05	21.35	3,079	4,027	1	

TABLE 3—*Food materials rejected in Dietary Study No. 41, etc.—(Concluded)*

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			Carbo- hydrates
				Protein	Fat	Grams	
		Pounds	Kilograms	Grams	Grams	Grams	Grams
<i>Vegetable food</i>							
Hominy	107	1.43	.65	54	4	513	
Oatmeal.....	89	1.41	.64	104	45	431	
Oat flakes.....	91	.55	.25	35	18	170	
Farina.....	103	1.95	.88	97	11	671	
Total breakfast foods .....	.....	5.34	2.42	290	78	1,785	
Corn meal.....	96	.46	.21	19	4	158	
Rice.....	120	.95	.43	34	1	341	
Flour	115	36.51	16.56	1,734	166	12,490	
Sugar, granulated	150	.02	.01	.....	.....	9	
Total flours, sugars, etc.....	.....	37.94	17.21	1,787	171	12,998	
Potatoes	177	16.48	7.48	164	7	1,375	
Beans.....	152	2.15	.97	219	18	581	
Beets	159	8.07	3.66	59	4	355	
Cabbage	161	.03	.01	.....	.....	1	

Carrots	171	.63	.29	3	1	26
Turnips	183	14.60	6.62	86	13	537
Total vegetables.....	.....	41.96	19.03	531	43	2,875
Total vegetable food.....	.....	85.24	38.66	2,608	292	17,658
Wet waste.....	260	1.33	.60	63	6	455
Total food.....	.....	133.62	60.61	5,750	4,325	18,114

TABLE 4

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 41 of 288 male patients, quiet, demented, non-workers, during week beginning January 12, 1899

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats	18	2	16	28	2	26	.....	.....	.....	334	27	307
Dairy products, etc.....	6	.....	6	36	....	36	7	.....	7	388	.....	388
Total animal food.....	24	2	22	64	2	62	7	.....	7	722	27	695
<i>Vegetable food</i>												
Breakfast foods.....	3	.....	3	1	...	1	20	1	19	104	4	100
Flours, sugars, etc.....	40	1	39	4	....	4	327	6	321	1,542	29	1,513
Fruits .....	...	.....	.....	.....	.....	.....	9	.....	9	37	.....	37
Vegetables	9	.....	9	1	.....	1	43	1	42	223	4	219
Total vegetable food.....	52	1	51	6	.....	6	399	8	391	1,906	37	1,869
Total food.....	76	3	73	70	2	68	406	8	398	2,628	64	2,564

TABLE 5

Food materials served in Dietary Study No. 42 of 284 male patients, quiet, demented, workers, at Willard State Hospital, during week beginning January 31, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT							
		Total food			NUTRIENTS				
					Protein	Fat	Carbohy- drates		
		Pounds	Kilograms	Grams	Grams	Grams	Grams	Grams	
<i>Animal food</i>									
Beef	14	674.63	306.01	45,290	55,383				
“ corned (canned)	24	19.54	8.86	2,525	1,347				
Mutton	25	25.00	11.34	1,531	3,209				
Pork, side	31	88.67	40.22	3,218	19,707				
“ ham (smoked)	33	73.50	33.34	5,267	13,040				
Lard	44	30.33	13.76	.....	13,760				
Fish, cod (salt)	51	70.50	31.98	5,113	128				
Total meats .....	.....	982.17	445.51	62,944	106,574				
<i>Eggs</i>									
Eggs	83	21.96	9.96	1,305	926				
Butter ..	79	135.65	61.53	615	52,300				316
Cheese	80	29.01	13.16	3,408	4,435				18,349
Milk	78	808.92	366.93	12,110	14,679				18,665
Total dairy products .....	.....	995.54	451.58	17,438	72,340				18,665
Total animal food .....	.....	1,977.71	897.09	80,382	178,914				18,665

TABLE 5—Food materials served in Dietary Study No. 42, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food		Protein	Fat	Carbohydrates			
		Pounds	Kilograms				Grams	Grams	
<i>Vegetable food</i>									
Hominy	107	40.00	18.14	1,506	109			14,335	
Oat flakes	91	80.00	36.29	5,733	2,576			24,710	
Total breakfast foods .....	.....	120.00	54.43	7,239	2,685			39,045
Corn meal.....	96	20.00	9.07	835	172			6,840	
Rice	120	40.75	18.48	1,479	55			14,603	
Flour	115	1,736.36	787.61	82,700	7,876			593,857	
Tapioca	121	25.00	11.34	45	34			9,920	
Cornstarch	124	5.00	2.27	.....	.....			1,928
Sugar, granulated	150	139.97	63.49	.....	.....			63,490
Molasses	149	235.14	106.66	2,560	.....			73,915
Total flours, sugars, etc. ....	.....	2,202.22	998.92	87,619	8,137			764,553
Beans	152	36.22	16.43	3,696	296			9,790	
Beets	159	96.56	43.80	701	44			4,249	
Cabbage	161	94.00	42.64	682	128			2,388	
Onions	175	54.23	24.60	394	74			2,435	
Potatoes	177	769.20	348.91	7,676	349			64,210	

Turnips	183	192.75	87.43	1,137	175	7,082
Tomatoes (canned)	181	37.75	17.12	206	34	685
Total vegetables .....	.....	1,280.71	580.93	14,492	1,100	90,839
Apples, dried	194	50.00	27.22	436	599	17,990
Prunes, dried	197	44.20	20.05	420	.....	14,697
Total fruits .....	.....	104.20	47.27	856	599	32,687
Total vegetable food .....	.....	3,707.13	1,681.55	110,206	12,521	927,124
Total food .....	.....	5,684.84	2,578.64	190,588	191,435	945,789

TABLE 6

Food materials rejected in Dietary Study No. 42 of 284 male patients, quiet, demented, workers, at Willard State Hospital during week beginning January 31, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			
		Pounds	Kilograms	Protein	Fat	Carbo- hydrates	
<i>Animal food</i>							
Beef.....	14	43.36	19.67	2,911	3,560	.....
Pork.....	30	14.38	6.52	880	1,689	.....
" ham (smoked).....	33	4.00	1.81	287	709	.....
Fish, cod (salt).....	51	6.71	3.04	486	12	.....
Total meats.....	.....	68.45	31.04	4,564	5,970	.....
Butter.....	79	.25	.11	1	96	.....
Eggs.....	83	.27	.12	16	11	.....
Total dairy products.....	.....	.52	.23	17	107	.....
Total animal food.....	.....	68.97	31.27	4,581	6,077	.....
<i>Vegetable food</i>							
Hominy.....	107	7.04	3.19	265	20	2,523	
Oat flakes.....	91	4.76	2.16	341	153	1,470	
Total breakfast foods.....	.....	11.80	5.35	606	173	3,993	

Corn meal.....	96	.85	.39	36	7	291
Rice.....	120	2.86	1.30	104	4	1,025
Flour.....	115	68.50	31.07	3,263	311	23,430
Tapioca.....	121	.60	.27	1	1	238
Sugar, granulated.....	150	.23	.10	.....	.....	104
Molasses.....	149	.50	.23	5	.....	157
Total flours, sugars, etc.....	.....	73.54	33.36	3,409	323	25,245
Beans.....	152	.38	.17	39	3	103
Beets.....	159	7.26	3.29	53	3	319
Onions.....	175	5.65	2.56	41	7	254
Potatoes.....	177	46.65	21.16	466	21	3,894
Turnips.....	183	13.10	5.94	77	12	481
Tomatoes (canned).....	181	2.22	1.01	12	2	40
Total vegetables.....	.....	75.26	34.13	688	48	5,091
Prunes .. .	197	5.15	2.34	49	.....	1,712
Total fruits.....	.....	5.15	2.34	49	.....	1,712
Total vegetable food.....	.....	165.75	75.18	4,752	544	36,041
Total food.....	.....	234.72	106.45	9,333	6,621	36,041

TABLE 7

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 42 of 284 male patients, quiet, demented, workers, during week beginning January 31, 1899

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
<i>Animal food</i>												
Meats	32	2	30	54	3	51	.....	.....	.....	633	36	597
Dairy products, etc.....	9	.....	9	36	.....	36	9	.....	9	409	.....	409
Total animal food.....	41	2	39	90	3	87	9	.....	9	1,042	36	1,006
<i>Vegetable food</i>												
Breakfast foods.....	4	.....	4	1	.....	1	20	2	18	108	8	100
Flours, sugars, etc.	44	2	42	4	.....	4	385	13	372	1,796	62	1,734
Fruits .....	.....	.....	.....	.....	.....	.....	16	1	15	66	4	62
Vegetables	7	.....	7	1	.....	1	46	3	43	227	12	215
Total vegetable food.....	55	2	53	6	.....	6	467	19	448	2,197	86	2,111
Total food	96	4	92	96	3	93	476	19	457	3,239	122	3,117

TABLE 8

Food materials served in Dietary Study No. 43 of 271 female patients, quiet, demented, workers, at Willard State Hospital during week beginning February 28, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates	Grams	
		Pounds	Kilograms	Grams					
<i>Animal food</i>									
Beef, side	14	231.93	105.20	15,570	19,040				
" steak	15	38.07	17.27	3,281	2,210				
" corned	22	53.00	24.04	3,438	5,722				
" " (canned)	24	13.70	6.21	1,770	944				
Mutton	25	58.20	26.40	3,564	7,471				
Pork, fresh	30	77.25	35.04	4,730	9,076				
" salt	41	19.50	8.85	743	5,935				
" shoulder (smoked)	40	32.63	14.80	1,924	3,937				
Lard	44	4.75	2.15	.....	2,155			
Fish, pickerel (fresh)	50	50.25	22.79	2,256	46				
" cod (salt)	51	18.00	8.17	1,306	33				
" herring (pickled)	52	31.95	14.49	2,681	913				
Total meats	.....	629.23	285.41	41,263	57,482			

TABLE 8.—Food materials served in Dietary Study No. 43, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT							
		Total food			NUTRIENTS				
					Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms	Grams	Grams	Grams	Grams		
<i>Animal food—(Continued)</i>									
Butter	79	129.67	58.82	588	50,000				
Cheese	80	33.64	15.26	3,952	5,142			366	
Milk	78	598.85	271.64	8,964	10,870			14,940	
Total dairy products	.....	762.16	345.72	13,504	66,012			15,306
Total animal food	.....	1391.39	631.13	54,767	123,494			15,306
<i>Vegetable food</i>									
Farina	103	31.45	14.27	1,569	171			10,830	
Hominy	107	15.00	6.80	565	41			5,373	
Oat flakes	91	13.25	6.01	950	427			4,093	
Total breakfast foods	.....	59.70	27.08	3,084	639			20,296
Flour	115	838.00	380.12	39,920	3,801			286,600	
Rice	120	30.60	13.88	1,112	41			10,967	
Cornstarch	125	8.15	3.70	222	.....			3,468
Sago	123	14.85	6.74	27	20			5,894	
Tapioca	121	14.65	6.65	27	20			5,814	
Sugar, granulated	150	108.12	49.04	.....	.....			49,040

Molasses	149	119.47	54.19	1,300	.....	37,555
Total flours, sugars, etc.....	.....	1,133.84	514.32	42,608	3,882	399,338
Potatoes ...	177	278.17	126.18	2,775	126	23,210
Beans.....	152	35.00	15.88	3,572	286	9,462
Beets	159	55.75	25.29	404	25	2,452
Carrots	171	20.00	9.07	100	29	834
Cabbage	161	160.35	72.74	1,164	218	4,073
Turnips	183	89.40	40.55	527	81	3,285
Total vegetables .....	.....	638.67	289.71	8,542	765	43,316
Apples, dried	194	29.50	13.38	214	294	8,844
Bananas.....	195	66.15	30.01	390	210	6,960
Raspberries	198	11.20	5.08	371	91	4,078
Prunes	197	18.75	8.51	179	.....	6,234
Plums	197	15.50	7.03	147	.....	5,153
Total fruits.....	.....	141.10	64.01	1,301	595	31,269
Total vegetable food .....	.....	1,973.31	895.12	55,535	5,881	494,219
Total food .....	.....	3,364.70	1,526.25	110,302	129,375	509,525

TABLE 9

Food Materials rejected in Dietary Study No. 43 of 271 female patients, quiet, demented, workers, at Willard State Hospital during week beginning February 28, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food		Protein	Fat	Carbo- hydrates			
		Pounds	Kilograms				Grams		
								Grams	
<i>Animal food</i>									
Beef, side.....	14	56.56	25.66	3,797	4,643	.....		
“ steak.....	15	4.55	2.06	392	264	.....		
“ corned.....	22	7.33	3.33	475	791	.....		
“ corned (canned).....	23	1.00	.45	118	84	.....		
Mutton.....	25	13.46	6.10	824	1,728	.....		
Pork, fresh.....	30	13.00	5.90	796	1,528	.....		
“ shoulder (smoked).....	40	6.53	2.96	385	787	.....		
Fish, pickarel (fresh).....	50	8.20	3.72	368	7	.....		
“ cod (salt).....	51	3.00	1.36	218	5	.....		
“ herring (pickled).....	52	6.40	2.90	536	183	.....		
Total meats.....	.....	120.03	54.44	7,909	10,020	.....		
Butter.....	79	1.06	.48	5	408	.....		
Cheese.....	80	.50	.23	60	78	.....		
Total dairy products.....	.....	1.56	.71	65	486	.....	6
Total animal food.....	.....	121.59	551.50	7,974	10,506	.....	6

Vegetable food

Farina	103	5.28	2.40	263	29	1,818
Hominy.....	107	4.60	2.09	173	13	1,649
Oat flakes.....	91	.72	.33	52	23	223
Total breakfast foods.....	.....	10.60	4.82	488	65	3,690
Flour	115	88.21	40.01	4,201	400	30,170
Rice	120	6.25	2.84	227	9	2,240
Sago.....	121	3.13	1.42	6	4	1,242
Tapioca.....	121	.78	.35	1	1	310
Molasses	149	.40	.18	4	.....	126
Total flours, sugars, etc.....	.....	98.77	44.80	4,439	414	34,088
Potatoes	177	6.96	3.16	69	3	581
Beans	152	2.88	1.31	294	24	778
Beets	159	17.90	8.12	130	8	787
Cabbage.....	161	2.88	1.31	21	4	73
Turnips	183	9.45	4.29	56	9	347
Total vegetables.....	.....	40.07	18.19	570	48	2,566
Apples, dried	194	6.52	2.96	47	65	1,954
Prunes	197	1.71	.78	16	.....	569
Plums.....	197	.95	.43	9	.....	316
Total fruits.....	.....	9.18	4.17	72	65	2,839
Total vegetable food.....	.....	158.62	71.98	5,569	592	43,183
Total food.....	.....	280.21	127.13	13,543	11,098	43,189

TABLE 10

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 43 of 271 female patients, quiet, demented, workers, during week beginning February 28, 1899

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY	
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories
<i>Animal food</i>											
Meats	22	4	18	30	5	25	.....	.....	.....	63	366
Dairy products, etc.	7	.....	7	35	.....	35	8	.....	8	.....	387
Total animal food	29	4	25	65	5	60	8	.....	8	63	693
<i>Vegetable food</i>											
Breakfast foods	2	.....	2	.....	.....	.....	11	2	9	8	45
Flours, sugars, etc.	22	2	20	2	.....	2	210	18	192	970	888
Fruits	1	.....	1	.....	.....	.....	17	2	15	74	66
Vegetables	4	1	3	1	.....	1	23	1	22	120	112
Total vegetable food	29	3	26	3	.....	3	261	23	238	1,217	1,111
Total food	58	7	51	68	5	63	269	23	246	1,973	1,804

TABLE 11

Food materials served in Dietary Study No. 44, of 275 female patients, quiet, demented, non-workers, at Willard State Hospital, during week beginning March 14, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms	Grams					
<i>Animal food</i>									
Beef, side	14	298.40	135.35	20,032	24,498	Grams	Grams		
“ corned (canned)	23	14.00	6.35	1,670	1,187		.....	
“ liver	20	14.65	6.65	1,376	399		.....	
Pork, fresh	30	9.50	4.31	582	1,116		100		
“ “ (steak)	30	12.00	5.44	735	1,410		.....	
“ shoulder (smoked)	40	9.25	4.19	545	1,116		.....	
Oysters	49	68.00	30.84	1,850	401		1,018		
Total meats	.....	425.80	193.13	26,790	30,127		1,118	
<hr/>									
Eggs	83	159.10	72.17	9,454	6,711		.....	
Butter	79	130.46	59.18	592	50,300		.....	
Cheese	80	22.40	10.16	2,631	3,424		244		
Milk	78	525.55	238.39	7,866	9,536		11,919		
Total dairy products	.....	837.51	379.90	20,543	69,771		12,163	
Total animal food	...	1,263.31	573.03	47,333	100,098		13,281		

TABLE 11—Food materials served in Dietary Study, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			Carbo-hydrates
				Protein	Fat	Grams	
		Pounds	Kilograms	Grams	Grams	Grams	Grams
<i>Vegetable food</i>							
Farina	104	12.25	5.56	611	78	4,240	
Hominy.....	107	10.00	4.54	376	27	3,583	
Oatmeal.....	90	36.30	16.47	2,651	1,184	11,115	
Total breakfast foods.....	.....	58.55	26.57	3,638	1,289	18,938	
Crackers	128	10.00	4.54	513	476	3,198	
Total breads.....	.....	10.00	4.54	513	476	3,198	
Barley	119	8.00	3.63	308	40	2,823	
Corn meal.....	96	18.75	8.50	782	162	6,413	
Flour	116	870.75	394.97	45,025	3,950	296,622	
Rice	120	23.00	10.43	835	31	8,242	
Macaroni.....	117	13.25	6.01	805	54	4,453	
Sugar, granulated	150	138.15	62.67	.....	.....	62,668	
Molasses	149	40.93	18.56	446	.....	12,866	
Total flours, sugars, etc.....	.....	1,112.83	504.77	48,201	4,237	394,087	
Potatoes	177	537.69	243.89	5,365	244	44,871	
Beans.....	152	43.94	19.93	4,485	359	11,880	

Beets	159	156.65	71.06	1,137	71	6,892
Cabbage	161	155.97	70.75	1,132	212	3,962
Total vegetables .....	.....	894.25	405.63	12,119	886	67,605
Apples, dried	194	31.55	14.31	229	315	9,461
Plums	197	15.00	6.80	143	.....	4,987
Total fruits .....	.....	46.55	21.11	372	315	14,448
Total vegetable food .....	.....	2,122.18	962.62	64,843	7,203	498,276
Total food .....	.....	3,385.49	1,535.65	112,176	107,301	511,557

TABLE 12

Food materials rejected in Dietary Study No. 44 of 275 female patients, quiet, demented, non-workers, at Willard State Hospital, during week beginning March 14, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food		Protein	Fat	Carbo- hydrates			
		Pounds	Kilograms				Grams		
<i>Animal food</i>									
Beef	199	18.07	8.20	1,246	1,271	.....		
“ corned (canned)	23	1.55	.70	185	131	.....		
Total meats . . . . .	.....	19.62	8.90	1,431	1,402	.....		
Butter	79	.20	.09	1	77	.....		
Cheese	80	.22	.10	26	34	2			
Milk	78	.80	.36	12	14	18			
Total dairy products . . . . .	.....	1.22	.55	39	125	20		
Total animal food . . . . .	.....	20.84	9.45	1,470	1,527	20		
<i>Vegetable food</i>									
Hominy	107	.25	.11	9	1	89			
Oatmeal	90	.42	.19	31	14	129			
Total breakfast foods . . . . .	.....	.67	.30	40	15	218		

Barley	119	1.50	.68	58	7	529
Flour	116	25.75	11.68	1,332	117	8,772
Rice	120	.10	.05	4	.....	36
Macaroni	117	.44	.20	27	2	148
Molasses	149	.75	.34	8	.....	236
Total flours, sugars, etc. ....	.....	28.54	12.95	1,429	126	9,721
Potatoes	177	4.63	2.10	46	2	386
Beans	152	.28	.13	29	2	76
Beets	159	10.00	4.53	73	5	440
Cabbage	161	2.50	1.13	18	3	64
Total vegetables .....	.....	17.41	7.89	166	12	966
Apples dried	194	0.75	.34	5	7	225
Total fruit .....	.....	.75	.34	5	7	225
Total vegetable food .....	.....	47.37	21.48	1,640	160	11,130
Total food .....	.....	68.21	30.93	3,110	1,687	11,150

TABLE 13

Nutrients and energy per person per day in food served, rejected and actually eaten in Dietary Study No. 44 of 275 female patients, quiet, demented, workers, during week beginning March 14, 1899

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats	14	1	13	16	1	15	1	.....	1	210	13	197
Dairy products, etc.....	11	.....	11	36	.....	36	6	.....	6	405	.....	405
Total animal food.....	25	1	24	52	1	51	7	.....	7	615	13	602
<i>Vegetable food</i>												
Breakfast food	2	.....	2	1	.....	1	10	.....	10	58	.....	58
Breads .....	.....	.....	.....	.....	.....	.....	2	.....	2	8	.....	8
Flours, sugars, etc.....	25	1	24	2	.....	2	205	5	200	962	25	937
Fruits	6	.....	6	1	.....	1	35	1	34	177	4	173
Vegetables .....	.....	.....	.....	.....	.....	.....	7	.....	7	29	.....	29
Total vegetable food	33	1	32	4	.....	4	259	6	253	1,234	29	1,205
Total food.....	58	2	56	56	1	55	266	6	260	1,849	42	1,807

TABLE 14

Food materials served in Dietary Study No. 45 of 280 male patients, quiet, demented, non-workers, at Willard State Hospital during week beginning April 5, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT				
		Total food		NUTRIENTS		
		Pounds	Kilograms	Protein	Fat	Carbo- hydrates
<i>Animal food</i>				Grams	Grams	(Grams)
Beef, sides.....	14	299.90	136.04	20,134	24,623	.....
" corned (canned) ..	23	68.45	31.05	8,166	5,806	.....
Pork, side.....	31	128.79	58.42	4,674	28,626	.....
Lard.....	44	11.82	5.36	.....	5,363	.....
Fish, cod (salt).....	51	109.00	49.44	7,911	198	.....
" herring (pickled).....	52	43.75	19.84	3,671	1,250	.....
Total meats.....	.....	661.71	300.15	44,556	65,866	.....
Eggs.....	83	3.37	1.53	200	142	.....
Butter.....	79	146.90	66.63	666	56,638	.....
Cheese.....	80	16.20	7.35	1,903	2,476	176
Milk.....	78	569.60	258.37	8,526	10,335	12,918
Total dairy products.....	.....	736.07	333.88	11,295	69,591	13,094
Total animal food.....	.....	1,397.78	634.03	55,851	135,457	13,094

TABLE 14—Food materials served in Dietary Study No. 45, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT							
		Total food		NUTRIENTS					
				Protein	Fat	Carbo- hydrates			
								Pounds	Kilograms	Grams	Grams
<i>Vegetable food</i>									
Farina	104	39.40	17.87	1,966	250	13,635			
Hominy	107	28.02	12.71	1,055	76	10,042			
Oat flakes.....	92	33.63	15.25	2,547	1,113	10,097			
Total breakfast food.....		101.05	45.83	6,568	1,439	33,774			
Barley	119	9.33	4.23	360	47	3,294			
Flour	116	1,444.70	655.32	74,706	6,553	492,142			
Rice	120	40.81	18.51	1,481	56	14,625			
Macaroni.....	117	9.15	4.15	556	37	3,074			
Tapioca	122	15.00	6.80	27	7	5,988			
Sugar, granulated.....	150	120.50	54.66	.....	.....	54,659			
Molasses	149	36.17	16.41	394	.....	11,369			
Total flours, sugars, etc		1,675.66	760.08	77,524	6,700	585,151			
Potatoes	177	620.17	281.31	6,189	281	51,760			
Beans	152	37.48	17.00	3,825	306	10,132			
Beets	159	118.75	53.87	862	54	5,225			
Cabbage.....	161	233.75	106.03	1,696	318	5,938			

Onions.....	175	15.75	7.14	114	21	707
Turnips.....	183	90.00	40.82	530	82	3,307
Total vegetables.....	.....	1,115.90	506.17	13,216	1,062	77,069
Prunes.....	197	47.10	21.36	449	.....	15,658
Raspberries.....	198	65.00	29.48	2,152	531	23,646
Total fruits.....	.....	112.10	50.84	2,601	531	39,304
Total vegetable food.....	.....	3,004.71	1,362.92	98,909	9,732	735,298
Total food.....	.....	4,402.49	1,996.95	154,760	145,189	748,392

TABLE 15

*Food materials rejected in Dietary Study No. 45 of 280 male patients, quiet, demented, non-workers, at Wil-
lard State Hospital, during week beginning April 5, 1899*

KIND OF FOOD MATERIAL	Reference number	WEIGHT				
		Total food		NUTRIENTS		
				Protein	Fat	Carbo- hydrates
		Pounds	Kilograms	Grams	Grams	Grams
<i>Animal food</i>						
Beef, side	14	17.74	8.05	1,191	1,456	.....
“ corned (canned).....	23	13.00	5.90	1,551	1,103	.....
Pork, side.....	31	11.10	5.03	403	2,466	.....
Fish, cod (salt)	51	7.50	3.40	544	14	.....
“ herring (pickled).....	52	1.20	.54	100	34	.....
Total meats.....	.....	50.54	22.92	3,789	5,073	.....
<i>Dairy products</i>						
Milk.....	78	1.80	.82	27	33	41
Butter	79	.35	.15	2	133	.....
Cheese	80	.25	.11	29	38	3
Total dairy products .....	.....	2.40	1.08	58	204	44
Total animal food .....	.....	52.94	24.00	3,847	5,277	44

Vegetable food

Farina.....	104	1.06	.48	53	7	368
Hominy.....	107	2.50	1.13	94	7	896
Oat flakes.....	92	1.59	.71	119	52	472
Total breakfast foods.....	.....	5.15	2.32	266	66	1,736
Flour.....	116	53.00	24.04	2,741	240	18,055
Rice.....	120	1.56	.71	57	2	560
Macaroni.....	117	.75	.34	46	3	252
Tapioca.....	122	.60	.27	1	.....	238
Total flours, sugars, etc.....	.....	55.91	25.36	2,845	245	19,105
Beans.....	152	1.50	.68	153	12	405
Beets.....	159	10.75	4.88	78	5	473
Cabbage.....	161	8.00	3.63	58	11	203
Onions.....	175	.95	.43	7	1	43
Potatoes.....	177	17.00	7.71	170	8	1,418
Turnips.....	183	11.00	4.99	65	10	404
Total vegetables.....	.....	49.20	22.32	531	47	2,946
Prunes.....	197	3.50	1.59	33	.....	1,164
Total fruits.....	.....	3.50	1.59	33	.....	1,164
Total vegetable food.....	.....	113.76	51.59	3,675	358	24,951
Total food.....	.....	166.70	75.59	7,522	5,639	24,995

TABLE 16

Nutrients and energy per person per day of food served, wasted and actually eaten in Dietary Study No. 45 of 280 malepatients, quiet, demented, non-workers, during week beginning April 5, 1899

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats	23	2	21	34	3	31	.....	.....	.....	411	36	375
Dairy products, etc.....	6	.....	6	35	.....	35	7	.....	7	379	.....	379
Total animal food.....	29	2	27	69	3	66	7	.....	7	790	36	754
<i>Vegetable food</i>												
Breakfast foods.....	3	.....	3	1	.....	1	17	1	16	91	4	87
Flours, sugars, etc.....	1	.....	1	.....	.....	.....	20	1	19	86	4	82
Fruits.....	40	2	38	3	.....	3	299	10	289	1,118	49	1,369
Vegetables.....	7	.....	7	1	.....	1	39	2	37	198	8	190
Total vegetable food.....	51	2	49	5	.....	5	375	14	361	1,793	65	1,728
Total food.....	80	4	76	74	3	71	382	14	368	2,579	114	2,482

TABLE 17

Food materials served in Dietary Study No. 46 of 278 male patients, quiet, demented, workers, at Willard State Hospital, during week beginning April 24, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			Carbo- hydrates
				Protein	Fat	Grams	
		Pounds	Kilograms	Grams	Grams	Grams	
<i>Animal food</i>							
Beef, round.....	13	98.40	44.63	8,480	5,713	.....	.....
“ side	14	631.65	286.52	42,405	51,860	.....	.....
“ corned (canned)	23	95.55	43.34	11,399	8,105	.....	.....
Mutton, chops	25	56.30	25.54	3,447	7,226	.....	.....
Pork, fresh.....	30	50.65	22.97	3,101	5,950	.....	.....
“ shoulder (smoked)	40	85.00	38.56	5,012	10,256	.....	.....
Lard.....	44	7.34	3.33	.....	3,330	.....	.....
Fish, bluefish	45	140.65	63.80	6,380	383	.....	.....
Total meats .....	.....	1,165.54	528.69	80,224	92,823	.....	.....
Eggs	83	154.68	70.16	9,191	6,525	.....	.....
Butter	79	136.82	62.06	621	52,754	.....	.....
Cheese.....	80	31.50	14.29	3,701	4,815	.....	343
Milk.....	78	781.75	354.60	11,702	14,184	.....	17,730
Total dairy products .....	.....	1,104.75	501.11	25,215	78,278	.....	18,073
Total animal food .....	.....	2,270.29	1,029.80	105,439	171,101	.....	18,073

TABLE 17—Food materials served in Dietary Study No. 46, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms	Grams					
<i>Vegetable food</i>									
Hominy.....	107	20.50	9.30	772	56	7,346			
Oatmeal.....	90	74.10	33.61	5,411	2,420	22,688			
Wheat flakes.....	114	20.00	9.07	1,216	127	6,740			
Total breakfast foods.....	.....	114.60	51.98	7,399	2,603	36,774			
Cornmeal.....	96	37.60	17.05	1,567	324	12,856			
Flour.....	116	1,695.21	768.95	87,660	7,689	577,479			
Rice.....	120	60.00	27.21	2,177	82	21,500			
Tapioca.....	122	11.85	5.38	22	5	4,730			
Sugar, granulated.....	150	127.42	57.80	.....	.....	57,798			
Molasses.....	149	194.70	88.31	2,120	.....	61,202			
Total flours, sugars, etc.....	.....	2,126.78	964.70	93,546	8,100	735,565			
Potatoes.....	177	617.25	279.99	6,160	280	51,517			
Beans.....	152	75.00	34.02	7,654	612	20,275			
Beets.....	159	110.25	50.01	800	50	4,852			
Corn (canned).....	173	60.60	27.49	770	330	5,222			
Onions.....	175	18.00	8.16	131	24	808			
Peas (canned).....	176	25.00	11.34	794	57	1,916			

Turnips	183	128.25	58.17	756	116	4,712
Tomato pickles	181	24.50	11.11	133	22	445
Total vegetables .....	.....	1,058.85	480.29	17,198	1,491	89,747
Apples, evaporated	194	20.25	9.19	147	202	6,072
Raspberries	198	17.75	8.05	588	145	6,457
Total fruits .....	.....	38.00	17.24	735	347	12,529
Total vegetable food .....	.....	3,338.23	1,514.21	118,878	12,541	874,615
Total food .....	.....	5,608.52	2,544.01	224,317	183,642	892,688

TABLE 18

Food materials rejected in Dietary Study No. 46 of 278 male patients, quiet, demented, workers, at Willard State Hospital, during week beginning April 24, 1899

KIND OF FOOD MATERIAL	Reference number	WEIGHT				
		Total food		NUTRIENTS		
		Pounds	Kilograms	Protein	Fat	Carbo-hydrates
<i>Animal food</i>						
Beef, round.....	13	8.00	3.63	689	464	.....
“ side	14	66.95	30.37	4,494	5,496	.....
“ corned (canned)	23	11.45	5.19	1,365	971	.....
Mutton, chops	25	8.40	3.81	514	1,078	.....
Pork, fresh	30	3.00	1.36	184	353	.....
“ shoulder (smoked).....	40	6.50	2.95	383	784	.....
Fish, bluefish	45	7.20	3.27	327	19	.....
Total meats.....	.....	111.50	50.58	7,956	9,165	.....
Butter	79	.40	.18	2	153	.....
Total dairy products.....	.....	.40	.18	2	153	.....
Total animal food .....	.....	111.90	50.76	7,958	9,318	.....

Vegetable food

Hominy	107	5.25	2.38	198	14	1,881
Oatmeal	90	10.12	4.59	739	330	3,097
Wheat flakes	114	1.90	.86	91	10	506
Total breakfast foods .....	.....	17.28	7.83	1,028	354	5,484
Corn meal	96	2.00	.91	83	17	684
Flour	116	80.50	36.52	4,163	365	27,422
Rice	120	1.15	.52	42	2	27,411
Tapioca	122	.12	.05	.....	.....	46
Molasses	149	1.00	.45	11	.....	315
Total flours, sugars, etc. ....	.....	84.77	38.45	4,299	384	28,878
Potatoes	177	36.85	16.71	368	17	3,075
Beans	152	2.00	.91	204	16	541
Beets	159	10.30	4.67	75	5	453
Corn (canned)	173	2.00	.91	25	11	172
Turnip	183	19.00	8.62	112	17	698
Total vegetables .....	.....	70.15	31.82	784	66	4,939
Total vegetable food .....	.....	172.19	78.10	6,111	804	39,301
Total food .....	.....	284.09	128.86	14,069	10,122	39,301

TABLE 19

Nutrients and energy per person per day in food served, rejected and actually eaten in Dietary Study No. 46 of 278 male patients, quiet, demented, workers, during week beginning April 24, 1899

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats	41	4	37	48	5	43	.....	.....	.....	615	63	552
Dairy products, etc.	13	.....	13	40	.....	40	.....	.....	.....	462	.....	462
Total animal food.....	54	4	50	88	5	83	9	.....	9	1,077	63	1,014
<i>Vegetable food</i>												
Breakfast foods.....	4	1	3	1	.....	1	19	3	16	103	16	87
Flours, sugars, etc. ....	.....	.....	.....	.....	.....	.....	6	.....	6	25	.....	25
Fruits	48	2	46	4	.....	4	378	15	363	1,784	70	1,714
Vegetables	9	.....	9	1	.....	1	46	2	44	235	8	227
Total vegetable food.....	61	3	58	6	.....	6	449	20	429	2,147	94	2,053
Total food	115	7	108	94	5	89	458	20	438	3,224	157	3,067

TABLE 20

Food materials served in Dietary Study No. 47 of 215 male patients, chronic, workers, at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIALS	Reference number	WEIGHT					NUTRIENTS		
		Total food			Protein	Fat	Carbohy- drates		
		Kilograms		Grams					
		Pounds	Grams						
<i>Animal food</i>									
Beef, roast	3	163.50	74.16	19,652	14,165	.....		
“ boiled	1	48.00	21.77	6,660	5,746	.....		
Mutton, roast	26	55.25	25.06	8,418	10,625	.....		
Pork, boiled	42	137.50	62.37	1,372	58,378	.....		
Fish, haddock	46	56.75	25.74	4,582	923	.....		
“ herring	53	37.00	16.79	3,038	1,108	.....		
Meat stew	67	90.50	41.05	3,612	616	1,601			
Hash	70	81.00	36.74	5,362	3,674	2,756			
Soup, pea	60	307.50	139.48	4,742	139	12,135			
“ vegetable	62	293.50	133.13	3,727	2,263	7,321			
Gravy	75	26.50	12.02	132	12	854			
Total meats and meat substitutes .....	.....	1,297.00	588.31	61,297	97,652	24,667		
Butter	79	121.25	55.00	550	46,750	.....		
Milk	78	78.00	35.38	1,167	1,415	1,769			
“ condensed	82	169.25	76.77	8,751	11,745	10,824			

TABLE 20—Food materials served in Dietary Study, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	Weight							
		Total food			NUTRIENTS				
		Pounds		Protein	Fat	Carbohydrates			
		Kilograms	Grams	Grams	Grams	Grams			
<i>Animal food—(Concluded)</i>									
Eggs, boiled.....	84	50.25	22.79	3,191	2,735	.....	.....	.....	.....
Cheese.....	80	55.75	25.29	6,550	8,521	607	.....	.....	.....
“ cottage.....	81	39.50	17.92	3,745	179	771	.....	.....	.....
Total dairy products .....	.....	514.00	233.15	23,954	71,345	13,971	.....	.....	.....
Total animal food.....	.....	1,811.00	821.46	85,251	168,997	38,638	.....	.....	.....
<i>Vegetable food</i>									
Oatmeal.	93	308.75	140.05	3,921	1,821	16,385	.....	.....	.....
Farina.....	105	95.00	43.09	775	86	5,386	.....	.....	.....
Hominy.....	108	197.00	89.36	1,340	89	12,779	.....	.....	.....
Corn meal mush	97	114.00	51.71	724	155	6,101	.....	.....	.....
Total breakfast foods .....	.....	714.75	324.21	6,760	2,151	40,651	.....	.....	.....
Bread, wheat	126	1,387.75	629.48	57,913	8,183	334,254	.....	.....	.....
“ corn.....	127	124.75	56.59	4,584	2,999	29,485	.....	.....	.....
Total breads.....	.....	1,512.50	686.07	62,497	11,182	363,739	.....	.....	.....
Sugar.....	150	49.75	22.57	.....	.....	22,565	.....	.....	.....
Prune sauce.....	145	160.00	72.58	653	.....	24,530	.....	.....	.....

Pudding, tapioca	136	95.00	43.09	215	215	9,049
Molasses cake	137	174.75	79.27	5,388	4,835	48,506
Total puddings, cakes, sauces and sugars.....	.....	479.50	217.51	6,256	5,050	104,650
Potatoes	178	286.75	130.07	3,252	130	27,185
Turnips.....	184	117.25	53.19	904	159	5,796
Cabbage	162	471.25	213.76	4,489	855	15,391
Rice	129	102.50	46.50	651	46	6,602
Beans.....	153	281.50	127.69	11,618	3,064	30,900
Macaroni and cheese.	190	55.50	25.18	1,158	579	4,204
Total vegetables and vegetable substitutes .....	.....	1,314.75	596.39	22,072	4,833	90,078
Total vegetable food.....	.....	4,021.50	1,824.18	97,585	23,216	599,118
Total food.....	.....	5,832.50	2,645.64	182,836	192,213	637,754

TABLE 21

Food materials rejected in Dietary Study No. 47 of 215 male patients, chronic, workers, at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			Carbohydrates
				Protein	Fat	Grams	
		Pounds	Kilograms	Grams	Grams	Grams	
<i>Animal food</i>							
Beef, boiled.....	1	5.00	2.27	694	599	.....	.....
“ roast.....	200	7.00	3.18	775	575	.....	.....
Pork.....	42	.50	.23	5	212	.....	.....
Fish, herring.....	53	10.25	4.65	841	307	.....	.....
Hash.....	70	5.00	2.27	331	227	.....	170
Stew.....	67	3.00	1.36	120	20	.....	53
Soup, pea.....	60	22.00	9.98	339	10	.....	868
Total meats and meat substitutes.....	.....	52.75	23.94	3,105	1,950	.....	1,091
Butter.....	79	.10	.05	.....	38	.....	.....
Cheese.....	80	.50	.23	59	77	.....	5
“ cottage.....	81	1.00	.45	95	5	.....	20
Total dairy products.....	.....	1.60	.73	154	120	.....	25
Total animal food.....	.....	54.35	24.67	3,259	2,070	.....	1,116

Vegetable food

Oatmeal.....	214	21.25	9.64	280	125	1,147
Farina.....	105	6.00	2.72	49	5	340
Hominy.....	223	21.00	9.53	143	9	1,353
Corn meal mush.....	97	13.25	6.01	85	18	709
Total breakfast foods.....	.....	61.50	27.90	557	157	3,549
Bread, wheat.....	126	32.75	14.86	1,366	193	7,888
“ corn.....	231	6.00	2.72	215	161	1,386
Total breads.....	.....	38.75	17.58	1,581	354	9,274
Pudding, tapioca.....	136	3.60	1.36	7	7	286
Cake, molasses....	137	1.50	.68	46	42	416
Prune sauce.....	239	4.75	2.16	17	.....	722
Total puddings, cakes and sauces.....	.....	9.25	4.20	70	49	1,424
Beans.....	243	5.50	2.50	217	110	577
Rice.....	129	4.00	1.81	25	2	258
Potatoes.....	178	19.00	8.62	215	9	1,801
Turnips.....	257	12.00	5.44	98	16	615
Cabbage.....	246	47.25	1.43	450	86	1,565
Macaroni and cheese.....	190	8.00	3.63	167	83	606
Total vegetables and vegetable substitutes.....	.....	95.75	43.43	1,172	306	5,422
Total vegetable food.....	.....	205.25	93.11	3,380	866	19,669
Total food.....	.....	259.60	117.78	6,639	2,936	20,785

TABLE 22

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 47 of 215 male patients, chronic, workers, during week beginning February 11, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes.....	41	2	39	65	1	64	16	1	15	838	22	816
Dairy products, etc	16	....	16	47	....	47	9	....	9	540	....	540
Total animal food	57	2	55	112	1	111	25	1	24	1,378	22	1,356
<i>Vegetable food</i>												
Breakfast foods	5	....	5	1	....	1	27	2	25	141	8	133
Breads	41	1	40	8	....	8	242	5	237	1,235	25	1,210
Puddings, cakes, sauces, sugars, etc....	4	....	4	3	....	3	70	2	68	331	8	323
Vegetables and vegetable substitutes....	15	1	14	3	....	3	60	4	56	335	21	314
Total vegetable food.....	65	2	63	15	....	15	399	13	386	2,042	62	1,980
Total food.....	122	4	118	127	1	126	424	14	410	3,420	84	3,336

TABLE 23

Food materials served in Dietary Study No. 48 of 520 female patients, chronic, light workers, at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT				NUTRIENTS		
		Total food		Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms				Grams	
<i>Animal food</i>								
Fish, herring.....	53	65.25	29.60	5,356	1,954	.....	
“ haddock	46	119.50	54.21	9,649	1,952	.....	
Hash	71	338.00	153.31	23,302	16,097	9,045		
Soup, meat.....	58	571.75	259.35	5,187	778	5,187		
“ pea.....	60	389.00	176.45	5,999	176	15,351		
“ vegetable	63	769.00	348.82	9,069	3,488	14,998		
Total meats and meat substitutes.....	.....	2,252.50	1,021.74	58,562	24,445	44,581	
Butter.	79	180.00	81.65	617	69,400	.....	
Milk, condensed.....	82	442.85	200.88	22,900	30,734	28,323		
Cheese	80	42.00	19.05	4,934	6,420	457		
“ cottage	81	83.50	37.87	7,915	379	1,629		
Total dairy products.....	.....	748.35	339.45	36,366	106,933	30,409	
Total animal food.....	.....	3,000.85	1,361.19	94,928	131,378	74,990	

TABLE 23—Food materials served in Dietary Study No. 48, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food			NUTRIENTS		
		Pounds	Kilograms	Protein	Fat	Carbo- hydrates,	
<i>Vegetable food</i>							
Oatmeal.....	94	561.75	254.81	7,134	3,312	29,558	
Farina.....	105	163.00	73.94	1,331	148	9,242	
Hominy.....	109	359.50	163.07	2,446	163	23,156	
Cornmeal mush.....	98	347.50	157.63	2,364	473	19,703	
Total breakfast foods.....	.....	1,431.75	649.45	13,275	4,096	81,659
Bread.....	126	2,284.75	1,036.36	95,346	13,473	550,310	
Sugar.....	150	121.10	54.93	.....	.....	54,930
Pudding, tapioca.....	136	129.50	58.74	294	294	12,335	
Cake, molasses.....	137	220.50	100.02	6,801	6,101	61,212	
Prune sauce.....	146	242.00	109.77	1,098	.....	37,541
Total puddings, cakes, sauces and sugars.....	.....	713.10	323.46	8,193	6,395	166,018
Potatoes.....	178	375.50	170.33	4,258	170	35,598	
Turnips.....	185	339.50	154.00	2,618	462	16,323	
Cabbage.....	163	617.00	279.87	5,597	1,119	19,870	
Rice.....	129	159.00	72.12	1,010	72	10,241	

Beans.....	154	301.50	136.76	11,762	4,513	31,046
Macaroni and cheese.....	190	174.25	79.04	3,636	1,818	13,200
Total vegetables and vegetable substitutes.....	.....	1,966.75	892.12	28,881	8,154	126,278
Total vegetable food.....	.....	6,396.35	2,901.39	145,695	32,118	924,265
Total food.....	.....	9,397.20	4,262.58	240,623	163,496	999,255

TABLE 24

Food materials rejected in Dietary Study No. 48 of 520 female patients, chronic, light workers, at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food		Protein	Fat	Carbo- hydrates			
		Pounds	Kilograms				Grams	Grams	
<i>Animal food</i>									
Fish, haddock.....	46	15.50	7.03	1,252	253	.....	Grams	
“ herring	53	19.75	8.96	1,621	591	.....	.....
Hash	211	21.75	9.87	1,470	1,016	612	.....	
Soup, pea	60	16.00	7.26	247	7	631	.....	
“ meat	58	25.00	11.34	227	34	227	.....	
“ vegetable	209	43.25	19.62	510	216	863	.....	
Total meats and meat substitutes.....	.....	141.25	64.08	5,327	2,117	2,333	.....	
Total animal food.....	.....	141.25	64.08	5,327	2,117	2,333	.....	
<i>Vegetable food</i>									
Oatmeal.....	215	19.00	8.62	233	112	999	.....	
Farina	105	5.50	2.50	45	5	312	.....	
Hominy	109	13.00	5.90	88	6	837	.....	
Corn meal mush	219	5.50	2.50	35	7	294	.....	
Total breakfast foods .....	.....	43.00	19.52	401	130	2,442	.....	

Bread.....	126	57.75	26.19	2,410	341	13,909
Pudding, tapioca.....	136	1.00	.45	2	2	95
Cake, molasses.....	137	.25	.11	8	7	69
Prune sauce.....	240	1.00	.45	4	.....	149
Total puddings, cakes and sauces.....	.....	2.25	1.01	14	9	313
Potatoes.....	178	16.50	7.48	187	7	1,564
Turnips.....	185	7.50	3.40	58	10	361
Cabbage.....	247	17.00	7.71	170	31	547
Rice.....	129	4.00	1.81	25	2	258
Beans.....	244	8.25	3.74	318	142	849
Macaroni and cheese.....	190	4.25	1.93	88	44	322
Total vegetables and vegetable substitutes.....	.....	57.50	26.07	846	236	3,901
Total vegetable food.....	.....	160.50	72.79	3,571	716	20,565
Total food.....	.....	301.75	136.87	8,898	2,833	22,898

TABLE 25

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 48 of 520 female patients, chronic, light workers, during week beginning February 11, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes.....	16	1	15	7	1	6	12	...	12	180	13	167
Dairy products, etc.....	10	...	10	29	...	29	8	...	8	343	....	343
Total animal food.....	26	1	25	36	1	35	20	...	20	523	13	510
<i>Vegetable food</i>												
Breakfast foods.	4	...	4	1	...	1	22	1	21	116	4	112
Breads	26	1	25	4	...	4	151	4	147	763	21	742
Puddings, cakes, sauces, etc .	2	...	2	2	...	2	46	...	46	215	....	215
Vegetables and vegetable substitutes...	8	...	8	2	...	2	35	1	34	195	4	191
Total vegetable food	40	1	39	9	...	9	254	6	248	1,289	29	1,260
Total food.....	66	2	64	45	1	44	274	6	268	1,812	42	1,770

TABLE 26

Food materials served in Dietary Study No. 49 of 110 male patients, non-workers, in hospital ward at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms	Grams					
								Grams	
<i>Animal food</i>							Grams		Grams
Beef, roast.....	4	12.50	5.67	1,554	1,032				
“ boiled.....	1	2.50	1.13	347	299				
“ steak.....	16	6.50	2.95	669	448				
Mutton, roast.....	26	1.50	.68	228	288				
Liver.....	21	3.00	1.36	338	74		24		
Pork.....	42	5.62	2.55	56		2,384			
“ ham.....	34	2.00	.91	198	449				
Fish, herring.....	53	5.25	5.38	431	157				
Hash.....	72	78.50	35.61	5,270	3,632		2,279		
Soup, meat.....	58	73.00	33.11	663	99		663		
“ pea.....	60	64.50	29.26	995	29		2,545		
“ vegetable.....	64	135.75	61.57	1,601	616		2,586		
Total meats and meat substitutes.....	.....	390.62	177.18	12,350	9,507		8,097	
Butter.....	79	47.25	21.43	214	18,217		.....	
Milk.....	78	313.75	142.32	4,696	5,693		7,116		

TABLE 26.—Food materials served in Dietary Study No. 49, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT						NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates			
		Pounds	Kilograms	Grams						
<i>Animal food—(Concluded)</i>										
Milk, condensed.....	82	35.95	16.31	1,859	2,495	2,299				
Cheese.....	80	4.00	1.81	470	611	44				
Total dairy products.....	.....	400.95	181.87	7,239	27,016	9,459			
Total animal food.....	.....	791.57	359.05	19,589	36,523	17,556			
<i>Vegetable food</i>										
Oatmeal.....	93	88.50	40.14	1,124	522	4,697				
Farina.....	105	27.50	12.47	225	25	1,559				
Hominy.....	110	54.50	24.72	371	25	3,486				
Corn meal mush.....	99	68.25	30.96	464	93	3,777				
Total breakfast food.....	.....	238.75	108.29	2,184	665	13,519			
Bread.....	126	637.25	289.06	26,594	3,758	153,489				
Sugar.....	150	25.30	11.48	.....	.....	11,476		
Pudding, tapioca.....	136	29.00	13.15	66	66	2,762				
Cake, molasses.....	137	4.00	1.81	123	111	1,110				

Ginger bread	137	31.00	14.06	956	858	8,605
Prune sauce.....	147	51.50	23.36	234	.....	7,965
Total puddings, cakes, sauces and sugars.....	.....	140.80	63.86	1,379	1,035	31,918
Potatoes	178	52.75	23.92	598	24	4,999
Turnips.....	186	90.00	40.82	694	122	4,245
Cabbage.....	164	106.00	48.08	1,010	192	3,414
Rice	129	25.00	11.34	159	11	1,610
Beans.....	155	69.50	31.53	2,680	1,072	7,156
Macaroni and cheese.....	190	23.50	10.66	490	245	1,780
Total vegetables and vegetable substitutes .....	.....	366.75	166.35	5,631	1,666	23,204
Total vegetable food.....	.....	1,383.55	627.56	35,788	7,124	222,130
Total food.....	.....	2,175.12	986.61	55,377	43,647	239,686

TABLE 27

Food materials rejected in Dietary Study No. 49 of 110 male patients, non-workers, at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT						
		Total food			NUTRIENTS			Carbohydrates
					Protein	Fat		
		Pounds	Kilograms	Grams	Grams	Grams	Grams	
<i>Animal food</i>								
Beef, roast	201	1.00	.45	133	101			
Pork	42	.50	.23	5	212			
" ham	34	1.50	.68	148	337			
Fish, herring	53	3.75	1.70	308	112			
Hash	212	9.00	4.08	584	400		269	
Soup meat	58	1.00	.45	9	1			
Total meats and meat substitutes	.....	16.75	7.59	1,187	1,163		278
Total animal food	.....	16.75	7.59	1,187	1,163		278
<i>Vegetable food</i>								
Hominy	224	12.50	5.67	85	6		794	
Oatmeal	216	5.00	2.27	66	29		274	
Corn meal mush	220	8.50	3.85	58	12		474	
Total breakfast foods	.....	26.00	11.79	209	47		1,542
Bread	126	7.00	3.18	292	41		1,686	

Cabbage.....	248	6.00	2.72	52	11	180
Potatoes	178	3.00	1.36	34	1	284
Total vegetables .....	.....	9.00	4.08	86	12	464
Total vegetable food .....	.....	42.00	19.05	587	100	3,692
Total food.....	.....	58.75	26.64	1,774	1,263	3,970

TABLE 28

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 49 of 110 male patients, non-workers, during week beginning February 11, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes.....	16	2	14	12	2	10	11	.....	11	222	27	195
Dairy products, etc.....	9	.....	9	35	.....	35	12	.....	12	412	.....	412
Total animal food.....	25	2	23	47	2	45	23	.....	23	634	27	607
<i>Vegetable food</i>												
Breakfast foods.....	3	.....	3	1	.....	1	18	2	16	95	8	87
Breads.....	35	.....	35	5	.....	5	199	2	197	1,006	8	998
Puddings, cakes, sauces, sugars etc....	2	.....	2	1	.....	1	42	.....	42	190	.....	190
Vegetables and vegetable substitutes...	7	.....	7	2	.....	2	30	1	29	170	4	166
Total vegetable food.....	47	.....	47	9	.....	9	289	5	284	1,461	20	1,441
Total food	72	2	70	56	2	54	312	5	307	2,095	47	2,048

TABLE 29

Food materials served in Dietary Study No. 50 of 150 female patients, non-workers, at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT				
		Total food		NUTRIENTS		
		Pounds	Kilograms	Protein	Fat	Carbohydrates
<i>Animal food</i>						
Beef, boiled.....	1	2.50	1.13	347	299	.....
“ roast.....	5	11.25	5.10	1,424	1,010	.....
“ steak.....	16	6.00	2.72	618	414	.....
Mutton, roast.....	26	2.00	.91	305	385	.....
Liver.....	21	3.25	1.47	366	80	27
Pork.....	42	7.75	3.52	77	3,290	.....
Fish, herring.....	53	12.00	5.44	985	359	.....
“ haddock.....	46	42.00	19.05	3,391	686	.....
Meat, stew.....	67	6.50	2.95	259	44	115
Hash.....	73	117.00	53.07	7,908	5,468	3,344
Soup, meat.....	58	121.00	54.89	1,098	165	1,098
“ pea.....	60	112.00	50.80	1,727	51	4,420
“ vegetable.....	65	283.25	128.48	3,341	1,156	5,268
Total meats and meat substitutes.....	.....	726.50	329.53	21,846	13,407	14,272
Butter.....	79	58.00	26.31	263	22,362	.....
Milk.....	78	429.00	194.59	6,422	7,784	9,730

TABLE 29—Food materials served in Dietary Study No. 50, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			
		Pounds	Kilograms	Protein	Fat	Carbo- hydrates	
<i>Animal food—(Continued)</i>							
Milk, condensed.....	82	48.95	22.20	2,531	3,397	3,131	
Cheese.....	80	7.25	3.29	852	1,108	80	
Total dairy products.....	.....	543.20	246.39	10,068	34,651	12,941
Total animal food.....	.....	1,269.70	575.92	31,914	48,058	27,213
<i>Vegetable food</i>							
Farina.....	105	59.50	26.99	486	54	3,373	
Hominy.....	109	98.00	44.45	667	44	6,312	
Oat meal.....	93	133.75	60.67	1,699	789	7,098	
Corn meal mush.....	109	95.25	43.21	648	130	5,357	
Total breakfast foods.....	.....	386.50	175.32	3,500	1,017	22,140
Bread.....	126	573.50	260.14	23,932	3,382	138,134	
Pudding, tapioca.....	136	32.00	14.52	73	73	3,048	
Cake, molasses.....	137	5.00	2.27	154	138	1,488	
Ginger bread.....	137	32.00	14.52	987	885	8,884	

Prune sauce	145	71.50	32.43	324	.....	10,962
Sugar.....	150	40.35	18.30	.....	.....	18,303
Total puddings, cakes, sauces and sugars.....	.....	180.85	82.04	1,538	1,096	42,685
Beans.....	156	101.00	45.81	4,077	1,237	10,858
Cabbage	163	167.00	75.75	1,515	303	5,378
Potatoes	178	68.00	30.85	771	31	6,447
Turnips	187	132.75	60.22	1,024	181	6,323
Macaroni and cheese.....	190	39.50	17.92	824	412	2,992
Rice	129	44.00	19.96	279	20	2,834
Total vegetables and vegetable substitutes.....	.....	552.25	250.51	8,490	2,184	34,832
Total vegetable food.....	.....	1,693.10	768.01	37,460	7,679	237,791
Total food.....	.....	2,962.80	1,343.93	69,374	55,737	265,004

TABLE 30

Food materials rejected in Dietary Study No. 50 of 150 patients, non-workers, at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			
				Protein	Fat	Carbo- hydrates	
		Pounds	Kilograms	Grams	Grams	Grams	
<i>Animal food</i>							
Beef, roast.....	202	2.00	.91	236	195	.....
Pork.....	42	3.00	1.36	30	1,274	.....
Fish, herring.....	53	2.25	1.02	185	67	.....
Meat, stew.....	67	1.00	.45	40	7	18	
Hash.....	213	18.50	8.39	1,301	898	486	
Total meats and meat substitutes.....	.....	26.75	12.13	1,792	2,441	504
Total animal food.....	.....	26.75	12.13	1,792	2,441	504
<i>Vegetable food</i>							
Hominy.....	225	14.00	6.35	89	6	857	
Oatmeal.....	217	6.00	2.72	76	35	313	
Corr meal mush.....	221	5.50	2.50	37	7	304	
Total breakfast foods.....	.....	25.50	11.57	202	48	1,474
Bread.....	126	32.75	14.86	1,367	193	7,888	

Prune sauce	241	2.75	1.25	11	.....	426
Beans.....	245	2.00	.91	80	6	211
Cabbage	249	8.00	3.63	83	15	272
Turnips	258	10.50	4.76	81	15	514
Potatoes	178	17.50	7.94	199	8	1,659
Macaroni and cheese.....	190	1.00	.45	21	10	76
Rice.....	129	2.00	.91	13	1	129
Total vegetables and vegetable substitutes .....	.....	41.00	18.60	477	55	3,561
Total vegetable food .....	.....	102.00	46.28	2,057	296	18,349
Total food .....	.....	128.75	58.41	3,849	2,737	13,853

TABLE 31

Nutrients and energy **per** person per day in food served, wasted and actually eaten in Dietary Study No. 50 of 150 female patients, non-workers, during week beginning February 11, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes.....	21	2	19	13	2	11	14	1	13	264	31	233
Dairy products, etc.....	9	.....	9	33	.....	33	12	.....	12	393	.....	393
Total animal food.....	30	2	28	46	2	44	26	1	25	657	31	626
<i>Vegetable food</i>												
Breakfast foods.....	3	....	3	1	.....	1	21	1	20	108	4	104
Breads.....	23	1	22	3	.....	3	132	8	124	633	37	626
Puddings, cakes, sauces, sugars, etc....	2	.....	2	1	.....	1	41	.....	41	185	.....	185
Vegetables and vegetable substitutes....	8	1	7	2	.....	2	33	3	30	187	16	171
Total vegetable food.....	36	2	34	7	.....	7	227	12	215	1,143	57	1,086
Total food.....	66	4	62	53	2	51	253	13	240	1,800	88	1,712

TABLE 32

Food materials served in Dietary Study No. 51, of 111 attendants at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms	Grams					
								Grams	
<i>Animal food</i>									
Beef, boiled.....	1	32.00	14.52	4,441	3,832				
“ roast.....	6	124.00	56.25	.....	.....		
“ steak.....	16	30.50	13.83	3,141	2,103				
Mutton, roast.....	27	19.50	8.85	3,882	3,777				
Liver.....	21	20.00	9.07	2,249	490		163		
Pork, salt.....	43	50.50	22.91	573	21,394				
“ ham.....	34	53.00	24.04	5,240	11,900				
Fish, herring.....	53	11.50	5.22	944	344				
“ haddock.....	46	40.00	18.14	3,230	653				
Beef stew.....	69	32.50	14.74	2,934	1,887		899		
Meat stew.....	67	42.00	19.05	1,676	286		743		
Hash.....	70	17.00	7.71	1,126	771		578		
Soup, pea.....	60	78.00	35.38	1,203	35		3,078		
“ vegetable.....	66	70.50	31.98	3,070	2,015		4,829		
Total meats and meat substitutes.....	.....	621.00	281.69	49,176	60,905		10,290	

TABLE 32—Food materials served in Dietary Study No. 51, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT							NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates				
		Pounds	Kilograms	Grams				Grams	Grams	Grams	
<i>Animal food—(Concluded)</i>											
Butter	79	147.50	66.91	669	56,896	12,315	4,522	481	27		
Milk	78	543.00	246.30	8,128	9,852	4,907	2,101	382	17,345		
" condensed	82	70.70	32.07	3,656	2,119	2,119	2,119	2,119	2,119		
Eggs, scrambled	85	39.25	17.81	294	382	382	382	382	382		
Cheese	80	2.50	1.14	294	382	382	382	382	382		
Total dairy products .....	.....	802.95	364.23	14,848	74,129	17,345	27,635				
Total animal food .....	.....	1,423.95	645.92	64,024	135,034	27,635					
<i>Vegetable food</i>											
Farina	105	59.50	26.99	486	54	3,374					
Hominy	109	118.50	53.75	806	54	7,632					
Corn meal mush	97	62.50	28.35	397	85	3,345					
Oatmeal	93	161.50	73.26	2,051	952	8,571					
Total breakfast food .....	.....	402.00	182.35	3,740	1,145	22,922					
Bread, wheat	126	342.25	155.25	14,282	2,018	82,435					
" corn	127	101.50	46.04	3,729	2,440	23,987					
Total bread .....	.....	443.75	201.29	18,011	4,458	106,422					

Cake, molasses.....	137	24.00	10.89	741	664	6,662
Prune sauce.....	148	52.00	23.59	212	.....	7,924
Sugar.....	150	272.50	123.60	.....	.....	123,605
Total cakes, sauces and sugars.....	.....	348.50	158.08	953	664	138,191
Beans.....	157	82.50	37.42	3,405	823	9,018
Cabbage.....	165	114.00	51.71	1,034	465	3,672
Potatoes.....	179	497.50	225.67	5,641	2,257	46,713
Turnips.....	188	73.25	33.22	532	1,096	3,289
Tomatoes.....	182	29.00	13.16	184	26	605
Macaroni and chese.....	191	30.00	13.61	572	694	1,987
Rice.....	129	41.00	18.60	260	19	2,641
Total vegetables and vegetable substitutes.....	.....	867.25	393.39	11,628	5,380	67,925
Bananas.....	196	35.00	15.88	206	95	3,492
Total fruits.....	.....	35.00	15.88	206	95	3,492
Total vegetable food.....	.....	2,096.50	950.99	34,538	11,742	338,952
Total food.....	.....	3,520.45	1,596.91	98,562	146,776	366,587

TABLE 33

Food materials rejected in Dietary Study No. 51 of 111 attendants at Long Island State Hospital, Kings Park Department, during week beginning February 11, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			
				Protein	Fat	Carbo- hydrates	
		Pounds	Kilograms	Grams	Grams	Grams	
<i>Animal food</i>							
Beef, boiled.....	1	9.00	4.08	1,249	1,078	.....
“ roast.....	203	5.00	2.27	753	553	.....
“ steak.....	16	6.50	2.95	669	448	.....
Mutton, roast.....	27	7.00	3.18	1,394	1,356	.....
Liver.....	21	10.50	4.76	1,181	257	86	
Pork, salt.....	43	14.00	6.35	140	5,944	.....
“ ham.....	34	6.00	2.72	593	1,347	.....
Fish, herring.....	53	4.00	1.81	328	120	.....
“ haddock.....	46	18.50	8.39	1,494	302	.....
Beef stew.....	69	4.00	1.81	361	232	111	
Meat stew.....	67	14.00	6.35	559	95	248	
Hash.....	70	3.00	1.36	199	136	102	
Total meats and meat substitutes.....	.....	101.50	46.03	8,920	11,868	547
Eggs, scrambled.....	85	14.75	6.69	790	796	181	
Total dairy products.....	.....	14.75	6.69	790	796	181
Total animal food.....	.....	116.25	52.72	9,710	12,664	728

Vegetable food

Farina.....	105	29.00	13.15	237	26	1,644
Hominy.....	226	62.00	28.12	422	28	3,965
Oatmeal.....	218	35.50	16.10	451	209	1,916
Corn-meal mush.....	97	24.50	11.11	156	33	1,311
Total breakfast foods.....	.....	151.00	68.48	1,266	296	8,836
Bread, wheat.....	126	35.75	16.22	1,492	211	8,611
“ corn.....	232	8.25	3.74	311	176	1,987
Total breads.....	.....	44.00	19.96	1,803	387	10,598
Prune sauce.....	242	1.00	.45	5	.....	159
Total sauce.....	.....	1.00	.45	5	.....	159
Beans.....	245	11.00	4.99	439	35	1,163
Cabbage.....	250	26.50	12.02	216	204	757
Potatoes.....	179	52.00	23.59	590	236	4,882
Turnips.....	259	32.50	14.74	236	457	1,459
Macaroni and cheese.....	191	3.00	1.36	57	69	199
Rice.....	129	4.00	1.81	25	2	258
Total vegetables and vegetable substitutes.....	.....	129.00	58.51	1,563	1,003	8,718
Total vegetable food.....	.....	325.00	147.40	4,637	1,686	28,311
Total food.....	.....	441.25	201.12	14,347	14,350	29,039

TABLE 34

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 51 of 111 attendants during week beginning February 11, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes	63	12	51	78	15	63	13	1	12	1,037	193	844
Dairy products, etc.....	19	1	18	95	1	94	22	.....	22	1,052	13	1,039
Total animal food.....	82	13	69	173	16	157	35	1	34	2,089	206	1,883
<i>Vegetable food</i>												
Breakfast foods.....	5	2	3	2	1	1	30	11	19	162	62	100
Breads	23	2	21	6	.....	6	137	11	126	712	53	659
Puddings, cakes, sauces, sugars, etc. . .	1	.....	1	1	.....	1	178	3	175	743	12	731
Vegetables and vegetable substitutes ..	15	2	13	7	1	6	92	11	81	504	63	441
Total vegetable food.....	44	6	38	16	2	14	437	36	401	2,121	190	1,931
Total food.....	126	19	107	189	18	171	472	37	435	4,210	396	3,814

TABLE 35

Food materials served in Dietary Study No. 52 of 294 male patients, chronic, workers, at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms	Grams					
								Grams	
<i>Animal food</i>									
Beef, boiled..	2	151.00	68.49	17,738	16,369				
“ roast.....	7	367.00	166.47	45,613	35,458				
“ steak.....	17	1.25	.57	108	81				
“ “ hamburger.....	19	27.00	12.25	3,490	2,339				
Pork, roast.....	32	31.75	14.40	2,549	9,763				
“ ham.....	35	8.00	3.63	918	1,230				
Fish, cod, creamed.....	56	111.00	50.35	9,566	554			5,740	
“ codfish balls.....	55	2.00	.91	100	202			219	
“ herring.....	54	39.50	17.92	5,447	8,313			13,760	
“ mackerel.....	47	61.00	27.67	5,589	2,130			7,720	
Stew.....	68	335.75	152.30	13,097	10,508			8,529	
Soup, pea.....	61	246.50	111.81	6,038	6,485			19,095	
Gravy.....	76	49.50	22.45	359	22			2,223	
Total meats and meat substitutes.....		1,431.25	649.22	110,612	93,454			57,286	
Butter.....		87.50	39.69	397	33,735				
Cheese.....	80	33.50	15.20	3,936	5,121			365	
“ pot.....	81	30.50	13.84	2,892	138			595	

TABLE 35.—Food materials served in Dietary Study No. 52, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT						NUTRIENTS		
		Total food			Protein	Fat	Carbo-hydrates			
		Pounds	Kilograms	Grams				Grams	Grams	
<i>Animal food—(Concluded)</i>										
Milk	78	144.20	65.41	2,158	2,616	3,272				
“ condensed	82	185.75	84.26	9,605	12,891	11,880				
Eggs, boiled	84	58.25	26.42	3,639	3,171	6,870				
“ scrambled	86	6.00	2.72	354	386	68				
Total dairy products .....	.....	545.70	247.54	23,041	58,058	23,050				
Total animal food .....	.....	1,976.95	896.76	133,653	151,512	80,336				
<i>Vegetable food</i>										
Corn meal mush	101	129.00	58.51	760	176	6,085				
Farina	106	107.00	48.54	971	146	6,892				
Hominy	111	486.25	220.56	3,088	221	29,114				
Oatmeal	95	100.50	45.59	1,413	593	5,516				
Total breakfast foods .....	.....	822.75	373.20	6,232	1,136	47,607				
Bread	126	1,959.75	888.94	81,783	11,556	472,029				
Pudding, bread	134	86.50	39.24	1,256	549	10,751				
Cake, ginger	138	255.25	115.78	6,715	6,947	60,669				
Apple sauce	140	79.75	36.18	145	181	10,635				

Peach sauce.....	141	83.50	37.88	417	76	5,416
Sugar.....	150	54.15	24.56	.....	.....	24,563
Syrup.....	151	71.25	32.32	.....	.....	22,623
Total puddings, cakes, sauces and sugars .....	.....	630.40	285.96	8,533	7,753	134,657
Beans	158	108.50	49.22	4,331	1,624	10,334
Cabbage.	166	360.75	163.64	3,109	655	11,127
Corn.....	172	278.00	126.10	3,909	1,387	24,842
Lettuce	174	88.50	40.14	432	120	1,164
Potatoes	178	105.50	47.86	1,219	48	10,190
Turnips	189	126.00	57.15	800	114	4,858
Turnip sauce.....	193	31.00	14.06	239	140	1,463
Macaroni and cheese.....	192	73.75	33.45	2,175	1,505	6,490
Rice	130	483.00	219.09	3,286	219	33,740
Total vegetables and vegetable substitutes.....	.....	1,655.00	750.71	19,550	5,812	104,208
Total vegetable food.....	.....	5,067.90	2,298.81	116,098	26,257	758,501
Total food.....	.....	7,044.85	3,195.57	249,751	177,769	838,837

TABLE 36

Food materials rejected in Dietary Study No. 52 of 294 male patients, chronic, workers, at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food			NUTRIENTS		
		Protein			Fat		
		Pounds	Kilograms	Grams	Grams	Carbo-hydrates	Grams
<i>Animal food</i>							
Beef, boiled.....	2	7.25	3.29	852	786	.....	.....
“ roast.....	204	54.25	24.61	6,718	4,848	.....	.....
“ steak.....	17	.50	.23	43	32	.....	.....
Pork, roast.....	32	1.25	.57	100	384	.....	.....
Fish, cod, creamed.....	56	21.75	9.87	1,874	109	.....	1,125
“ mackerel.....	47	9.00	4.08	824	314	.....	.....
Stew.....	68	8.50	3.86	232	266	.....	216
Total meats and meat substitutes....	.....	102.50	46.51	10,743	6,739	.....	1,341
Butter.....	79	.25	.11	1	96	.....	.....
Cheese.....	80	2.00	.91	235	306	.....	22
Total dairy products.....	.....	2.25	1.02	236	402	.....	22
Total animal food.....	.....	104.75	47.53	10,979	7,141	.....	1,363

Vegetable food

Farina.....	106	2.00	.91	18	3	129
Hominy.....	227	25.75	11.68	164	12	1,565
Oatmeal.....	95	6.00	2.72	84	35	329
Total breakfast foods.....	.....	33.75	15.31	266	50	2,023
Bread.....	126	51.75	23.47	2,160	305	12,464
Cake, ginger....	138	2.00	.91	53	54	475
Apple sauce.....	140	.25	.11	.....	1	33
Peach sauce.....	141	2.00	.91	10	2	130
Total puddings, cakes, sauces and sugars.....	.....	4.25	1.93	63	57	638
Beans.....	158	1.25	.57	50	19	119
Corn.....	172	3.00	1.36	42	15	268
Cabbage.....	251	19.50	8.85	169	35	593
Lettuce.....	174	49.00	22.23	267	67	644
Potatoes.....	178	20.00	9.07	243	9	2,032
Turnips.....	189	8.50	3.86	54	7	328
Macaroni and cheese.....	192	6.50	2.95	192	132	572
Rice.....	233	12.00	5.44	93	5	925
Total vegetables and vegetable substitutes.....	.....	119.75	54.33	1,110	289	5,481
Total vegetable food.....	.....	209.50	95.04	3,599	701	20,606
Total food.....	.....	314.25	142.57	14,396	7,842	21,969

TABLE 37

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 52 of 294 male patients, chronic, workers, during week beginning July 24, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes	54	5	49	45	3	42	28	1	27	755	52	703
Dairy products, etc.....	11	.....	11	28	....	28	11	.....	11	351	.....	351
Total animal food.....	65	5	60	73	3	70	39	1	38	1,106	52	1,054
<i>Vegetable food</i>												
Breakfast foods.....	3	.....	3	1	.....	1	23	1	22	116	4	112
Breads	40	1	39	5	.....	5	229	6	223	1,150	29	1,121
Puddings, cakes, sauces, sugars, etc....	4	.....	4	4	....	4	65	.....	65	319	.....	319
Vegetables and vegetable substitutes....	10	1	9	3	.....	3	51	3	48	278	16	252
Total vegetable food.....	57	2	55	13	.....	13	368	10	358	1,863	49	1,814
Total food.....	122	7	115	86	3	83	407	11	396	2,969	101	2,868

TABLE 38

Food materials served in Dietary Study No. 53 of 587 female patients, chronic, light workers, at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food			Protein	Fat	Carbo- hydrates		
		Pounds	Kilograms	Grams					
<i>Animal food</i>									
Beef, roast.....	8	9.00	4.08	1,127	1,094				
" steak.....	18	16.50	7.48	1,317	1,310				
" " hamburger.....	19	4.75	2.16	614	412				
Pork, ham.....	36	8.50	3.86	941	1,265				
Fish, cod, creamed.....	56	3.00	1.36	259	15		155		
" codfish balls.....	55	3.00	1.36	150	303		328		
" herring (salt).....	54	32.25	14.63	4,447	6,788				
" mackerel.....	47	135.50	61.46	12,416	4,733				
Beef stew.....	68	301.00	136.53	11,742	9,421		7,646		
Hash.....	74	127.25	57.72	7,973	5,023		10,168		
Soup, bean.....	57	380.00	172.37	3,792	5,861		12,582		
" meat.....	59	345.25	156.61	9,553	12,059		5,011		
" pea.....	61	260.00	117.94	6,368	6,840		15,921		
Total meats and meat substitutes.....	.....	1,626.00	737.56	60,699	55,124		51,811	
Butter.....	79	255.77	116.02	1,160	98,614		.....	
Cheese.....	80	215.25	97.64	25,288	32,904		2,343		

TABLE 38.—Food materials served in Dietary Study No. 53, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			
				Protein	Fat	Carbo-hydrates	
		Pounds	Kilograms	Grams	Grams	Grams	
<i>Animal food—(Concluded)</i>							
Cheese, pot.....	81	54.50	24.72	5,167	247	1,063	
Eggs, boiled.....	84	3.00	1.36	191	163	...	
Milk.....	78	535.80	243.04	8,020	9,722	12,152	
“ condensed.....	82	229.15	103.94	11,849	15,903	14,656	
Total dairy products.....	.....	1,293.47	586.72	51,675	157,553	30,214
Total animal food.....	.....	2,919.47	1,324.28	112,374	212,677	82,025
<i>Vegetable food</i>							
Corn meal mush.....	102	147.00	66.68	734	133	6,068	
Farina.....	106	184.50	83.69	1,674	251	11,884	
Hominy.....	111	1,051.50	476.96	6,677	477	62,959	
Oatmeal.....	95	172.50	78.25	2,426	1,017	9,468	
Total breakfast foods.....	.....	1,555.50	705.58	11,511	1,878	90,379
Bread.....	126	2,804.25	1,272.01	117,025	16,536	675,436	
Pudding, bread.....	134	140.00	63.50	2,032	889	17,400	
Cake, ginger.....	138	269.25	122.13	7,084	7,328	63,997	

Peach sauce	141	132.25	59.99	660	120	8,578
Sugar	150	145.65	66.07	.....	.....	66,067
Syrup	151	153.50	69.63	.....	.....	48,740
Total puddings, cakes, sauces and sugars.....	.....	840.65	381.32	9,776	8,337	204,782
Beans.....	158	176.50	80.06	7,045	2,642	16,813
Cabbage	167	585.00	265.36	5,307	1,061	18,044
Corn.....	172	100.35	45.52	1,411	501	8,966
Lettuce	174	150.00	68.04	816	204	1,973
Turnips.....	189	371.75	168.63	2,360	337	14,333
Turnip sauce ...	193	44.50	20.19	343	202	2,099
Macaroni and cheese.....	192	93.50	42.41	2,757	1,908	8,228
Rice	131	751.25	340.77	5,112	341	51,796
Total vegetables and vegetable substitutes.....	.....	2,272.85	1,030.98	25,151	7,196	122,252
Total vegetable food.....	.....	7,473.25	3,389.89	163,463	33,947	1,092,849
Total food.....	.....	10,392.72	4,714.17	275,837	246,624	1,174,874

TABLE 39

Food materials rejected in Dietary Study No. 53 of 587 female patients, chronic, light workers, at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food		Protein	Fat	Carbo- hydrates	Protein	Fat	Carbo- hydrates
		Pounds	Kilograms				Grams	Grams	Grams
<i>Animal food</i>									
Fish, cod, creamed	56	3.00	1.36	259	15	155			
" mackerel	47	19.50	8.85	1,787	681	.....		
Beef, stew	68	17.75	8.05	692	555	.....		
Hash	74	5.50	2.50	344	217	439			
Soup, bean	57	16.50	7.48	165	254	546			
" meat	59	11.75	5.33	325	410	171			
" pea	61	12.75	5.78	312	335	781			
Total meats and meat substitutes .....	.....	86.75	39.35	3,884	2,467	2,543			
Cheese	80	4.00	1.81	470	611	44			
" pot	81	.75	.34	71	3	15			
Total dairy products .....	.....	4.75	2.15	541	614	59			
Total animal food .....	.....	91.50	41.50	4,425	3,081	2,602			

Vegetable food

Corn meal mush	222	9.00	4.08	49	8	384
Farina	106	16.00	7.26	145	22	1,031
Hominy	228	65.00	29.48	413	29	3,862
Oatmeal	95	9.00	4.08	126	53	494
Total breakfast food .....	.....	99.00	44.90	733	112	5,771
Bread	126	107.35	48.69	4,480	633	25,857
Cake, ginger	138	.75	.34	20	20	178
Peach sauce	141	4.25	1.93	21	4	276
Total cake and sauce .....	.....	5.00	2.27	41	24	454
Beans	158	7.25	3.29	289	109	691
Cabbage	252	36.75	16.67	333	67	1,184
Lettuce	174	101.00	45.81	550	117	1,329
Turnips	189	51.75	23.47	329	47	1,995
Macaroni and cheese	192	11.75	5.33	346	240	1,034
Rice	234	20.75	9.41	141	9	1,487
Total vegetables and vegetable substitutes .....	.....	229.25	103.98	1,988	589	7,720
Total vegetable food .....	.....	440.60	199.84	7,243	1,358	39,802
Total food .....	.....	532.10	241.34	11,668	4,439	42,404

TABLE 40

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 53 of 587 female patients, chronic, light workers, during week beginning July 24, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes.....	15	1	14	13	1	12	13	1	12	236	18	218
Dairy products, etc.....	12	.....	12	38	.....	38	7	.....	7	431	.....	431
Total animal food	27	1	26	51	1	50	20	1	19	667	18	649
<i>Vegetable food</i>												
Breakfast foods.....	3	.....	3	.....	.....	.....	22	1	21	102	4	98
Breads	29	1	28	4	.....	4	164	6	158	929	29	860
Puddings, cakes, sauces, etc....	2	.....	2	2	.....	2	50	.....	50	232	.....	232
Vegetables and vegetable substitutes....	6	1	5	2	.....	2	30	2	28	166	12	154
Total vegetable food	40	2	38	8	.....	8	266	9	257	1,329	45	1,284
Total food.....	67	3	64	59	1	58	286	10	276	1,996	63	1,933

TABLE 41

Food materials served in Dietary Study No. 54 of 124 male patients, non-workers, in hospital ward, at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food		Protein	Fat	Carbo- hydrates	Grams		
		Pounds	Kilograms						
								Grams	
<i>Animal food</i>									
Beef, boiled	2	4.50	2.04	529	488				
“ roast	9	17.25	7.83	2,152	1,651				
“ steak	17	9.00	4.08	776	584				
“ hamburger	19	3.75	1.70	485	325				
Mutton chops	28	10.00	4.54	875	653				
Pork, roast	32	3.00	1.36	241	923				
“ ham	37	7.00	3.18	816	1,092				
Fish, cod, creamed	56	20.50	9.30	1,767	102				1,060
“ herring	54	10.00	4.54	1,379	2,104				
“ mackerel	47	59.50	26.99	5,452	2,078				
Stew	68	77.00	34.93	3,004	2,410				1,956
Hash	74	22.50	10.21	1,408	888				1,796
Soup, bean	57	85.50	38.78	853	1,318				2,831
“ meat	59	77.50	35.15	2,144	2,707				1,125
“ pea	61	86.00	39.00	2,106	2,262				5,265
Total meats and meat substitutes		493.00	223.63	23,987	19,585				14,033

TABLE 41.—Food materials served in Dietary Study No. 54, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT									
		Total food				NUTRIENTS					
		Protein		Fat		Carbo- hydrates					
		Grams	Protein	Grams	Fat	Grams	Carbo- hydrates	Grams	Protein	Grams	Fat
<i>Animal food—(Concluded)</i>											
Butter.....	79	60.00	27.22	272	23,133	.....	.....	.....	.....	.....	.....
Cheese.....	80	17.50	7.94	2,056	2,675	190	.....	.....	.....	.....	.....
“ pot.....	81	21.25	9.64	2,016	96	415	.....	.....	.....	.....	.....
Milk.....	78	576.20	261.36	8,625	10,455	13,068	.....	.....	.....	.....	.....
“ condensed.....	82	32.60	14.79	1,686	2,263	2,085	.....	.....	.....	.....	.....
Eggs, boiled.....	84	24.65	11.18	1,565	1,342	.....	.....	.....	.....	.....	.....
Total dairy products.....	.....	732.20	332.13	16,220	39,964	15,758	.....	.....	.....	.....	.....
Total animal food.....	.....	1,225.20	555.76	40,207	59,549	29,791	.....	.....	.....	.....	.....
<i>Vegetable food</i>											
Farina.....	106	41.00	18.60	372	56	2,641	.....	.....	.....	.....	.....
Hominy.....	112	323.25	146.63	2,053	147	19,061	.....	.....	.....	.....	.....
Oatmeal.....	95	48.50	22.00	682	286	2,662	.....	.....	.....	.....	.....
Total breakfast foods.....	.....	412.75	187.23	3,107	489	24,364	.....	.....	.....	.....	.....
Bread.....	126	567.75	257.53	23,693	3,348	136,749	.....	.....	.....	.....	.....
Pudding, bread.....	134	16.50	7.48	239	105	2,051	.....	.....	.....	.....	.....
Cake, ginger.....	138	26.00	11.79	684	708	6,180	.....	.....	.....	.....	.....

Apple sauce	140	30.00	13.61	54	68	4,001
Peach "	142	59.75	27.10	407	81	5,366
Sugar	150	24.25	11.00	.....	.....	11,000
Total puddings, cakes, sauces and sugars .....	.....	156.50	70.98	1,384	962	28,598
Beans	158	38.00	17.24	1,517	569	3,620
Cabbage	168	131.25	59.54	1,131	179	3,870
Corn	172	38.00	17.24	534	190	3,395
Turnips	189	57.50	26.08	365	52	2,217
Turnip sauce	193	15.50	7.03	120	70	731
Macaroni and cheese	192	22.75	10.32	671	464	2,002
Rice	132	208.25	94.46	1,511	94	14,736
Total vegetables and vegetable substitutes .....	.....	511.25	231.91	5,849	1,618	30,571
Total vegetable food .....	.....	1,648.25	747.65	34,033	6,417	220,282
Total food .....	.....	2,873.45	1,303.41	74,240	65,966	250,073

TABLE 43

Food materials rejected in Dietary Study No. 54 of 124 male patients, non-workers, in hospital ward, at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL.	Reference number	WEIGHT					
		Total food		NUTRIENTS			
				Protein	Fat	Carbo- hydrates	
		Pounds	Kilograms	Grams	Grams	Grams	
<i>Animal food</i>							
Fish, mackerel.....	47	1.00	.45	92	35	.....
Stew	68	10.00	4.54	390	313	254	
Total animal food .....	.....	11.00	4.99	482	348	254
<i>Vegetable food</i>							
Hominy.....	228	19.25	8.73	122	9	1,144	
Oatmeal	95	1.00	.45	14	6	55	
Total breakfast food.....	.....	20.25	9.18	136	15	1,199
Bread....	126	26.25	11.91	1,095	155	6,323	

Cabbage	253	9.25	4.20	71	13	252
Turnips	189	9.75	4.42	62	8	376
Rice	235	18.50	8.39	143	8	1,376
Total vegetables and vegetable substitutes .....	. ....	37.50	17.01	276	29	2,004
Total vegetable food .....	.....	84.00	38.10	1,507	199	9,526
Total food .....	.....	95.00	43.09	1,989	547	9,780

TABLE 43

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 54 of 124 male patients, non-workers, in hospital ward, during week beginning July 24, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes.....	27	1	26	23	.....	23	16	.....	16	390	4	386
Dairy products, etc.....	19	.....	19	46	.....	46	18	.....	18	580	.....	580
Total animal food.....	46	1	45	69	.....	69	34	.....	34	970	4	966
<i>Vegetable food</i>												
Breakfast foods	3	.....	3	1	.....	1	29	2	27	141	8	133
Breads	27	1	26	4	.....	4	157	7	150	792	33	759
Puddings, cakes, sauces, sugars, etc....	2	.....	2	1	.....	1	33	.....	33	152	.....	152
Vegetables and vegetable substitutes...	7	.....	7	2	.....	2	35	2	33	191	8	183
Total vegetable food.....	39	1	38	8	.....	8	254	11	243	1,276	49	1,227
Total food.....	85	2	83	77	.....	77	288	11	277	2,246	53	2,193

TABLE 44

Food materials served in Dietary Study No. 55 of 183 female patients, non-workers, in hospital ward, at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food		Protein	Fat	Carbohy- drates			
		Pounds	Kilograms				Grams	Grams	
<i>Animal food</i>									
Beef, boiled.....	2	1.75	.79	206	190	.....	.....
“ roast.....	10	49.25	22.34	6,210	5,116	.....	.....
“ steak.....	17	4.00	1.81	345	259	.....	.....
“ “ hamburger.....	19	4.25	1.93	549	368	.....	.....
Mutton, chop.....	28	10.75	4.88	941	702	.....	.....
Pork, roast.....	32	3.00	1.36	241	923	.....	.....
“ ham.....	38	7.00	3.18	762	1,035	.....	.....
Fish, cod, creamed.....	56	21.00	9.53	1,810	105	1,086	.....	
“ herring.....	54	12.00	5.44	1,654	2,526	.....	.....
“ mackerel.....	47	17.00	7.71	1,557	594	.....	.....
Stew.....	68	43.50	19.73	1,697	1,362	1,105	.....	
Hash.....	74	27.00	12.25	1,690	1,065	2,155	.....	
Soup, bean.....	57	123.50	56.02	1,232	1,905	4,089	.....	
“ meat.....	59	121.50	55.11	3,362	4,243	1,763	.....	
“ pea.....	61	134.00	60.78	3,282	3,525	8,206	.....	
Total meats and meat substitutes .....	.....	579.50	262.86	25,538	23,918	18,404	.....	

TABLE 44.—Food materials served in Dietary Study No. 55, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT						NUTRIENTS		
		Total food			Protein	Fat	Carbohy- drates			
		Pounds	Kilograms	Grams				Grams	Grams	
<i>Animal food—(Concluded)</i>										
Butter	79	63.25	28.69	287	24,386	.....	.....	.....	.....	.....
Cheese	80	27.50	12.47	3,231	4,203	299	224	299	224	299
“ pot	81	11.50	5.22	1,090	52	1,811	4,614	.....	.....	.....
Milk	78	653.05	296.22	9,775	11,849	.....	.....	.....	.....	.....
“ condensed	82	72.15	32.73	3,731	5,007	.....	.....	.....	.....	.....
Eggs, boiled	84	13.37	6.06	849	727	.....	.....	.....	.....	.....
Total dairy products	.....	840.82	381.39	18,963	46,224	.....	.....	.....	.....	.....
Total animal food	.....	1,420.32	644.25	44,501	70,142	.....	.....	.....	.....	.....
<i>Vegetable food</i>										
Corn meal mush	102	47.25	21.43	236	42	.....	.....	.....	.....	.....
Farina	106	44.50	20.19	404	61	.....	.....	.....	.....	.....
Hominy	111	225.50	102.29	1,432	102	.....	.....	.....	.....	.....
Outmeal	95	46.50	21.09	654	274	.....	.....	.....	.....	.....
Total breakfast foods	.....	363.75	165.00	2,726	479	.....	.....	.....	.....	.....
Bread	126	584.25	265.02	24,381	3,445	.....	.....	.....	.....	.....

Pudding, bread	134	18.50	8.39	269	117	2,299
Cake, ginger	138	87.25	39.58	2,295	2,374	20,738
Apple sauce	140	36.75	16.67	67	83	4,901
Peach sauce	143	58.75	26.65	453	80	5,862
Syrup	151	13.25	6.01	.....	.....	4,208
Sugar	150	36.65	16.63	.....	.....	16,625
Total puddings, cakes, sauces and sugars	.....	251.15	113.93	3,084	2,654	54,633
Beans	158	147.50	66.91	5,888	2,208	14,051
Cabbage	169	114.75	52.05	989	156	3,435
Corn	172	22.00	9.98	309	110	1,966
Lettuce	174	5.25	2.38	29	7	69
Turnips	189	102.50	46.49	651	93	3,954
Turnip sauce	193	15.00	6.80	116	68	707
Macaroni and cheese	192	21.00	9.53	619	429	1,848
Rice	133	219.50	99.57	1,593	100	15,432
Total vegetables and vegetable substitutes	.....	647.50	293.71	10,194	3,171	41,462
Total vegetable food	.....	1,846.65	837.66	40,385	9,749	257,689
Total food	.....	3,266.97	1,481.91	84,886	79,891	296,041

TABLE 45

Food materials rejected in Dietary Study No. 55 of 183 female patients, non-workers, in hospital ward, at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT				
		Total food		NUTRIENTS		
		Pounds	Kilograms	Protein	Fat	Carbo- hydrates
<i>Animal food</i>						
Beef, roast	205	1.75	.79	218	145	.....
Fish, cod, creamed	56	8.50	3.86	733	42	440
" herring.....	54	1.50	.68	206	316	.....
" mackerel.....	47	1.50	.68	137	52	.....
Stew.....	68	12.50	5.67	488	391	318
Hash	74	1.00	.45	63	40	80
Soup, pea	61	10.50	4.76	257	276	643
Total meats and meat substitutes.....	.....	37.25	16.89	2,102	1,262	1,481
Butter.....	79	.25	.11	1	96	.....
Eggs, boiled	84	.50	.23	32	27	.....
Cheese	80	2.00	.91	235	306	22
Total dairy products .....	.....	2.75	1.25	268	429	22
Total animal food.....	.....	40.00	18.14	2,370	1,691	1,503

Vegetable food

Farina	106	6.00	2.72	54	8	387
Corn meal mush	102	.75	.34	4	1	31
Hominy	229	22.00	9.98	150	10	1,357
Total breakfast food .....	.....	28.75	13.04	208	19	1,775
Bread	126	38.50	17.46	1,607	227	9,273
Peach sauce	238	3.25	1.47	16	3	211
Beans	158	11.00	4.99	439	165	1,048
Cabbage	254	14.25	6.46	116	19	414
Lettuce	174	3.50	1.59	19	5	46
Turnips	189	22.50	10.21	143	20	868
Rice	236	6.25	2.84	40	.....	394
Total vegetables and vegetable substitutes .....	.....	57.50	26.09	757	209	2,770
Total vegetable food .....	.....	128.00	58.06	2,588	458	14,029
Total food .....	.....	168.00	76.20	4,958	2,149	15,532

TABLE 46

Nutrients and energy per person per day in food served, wasted and actually eaten in Dietary Study No. 55 of 183 female patients, non-workers, in hospital ward, during week beginning July 24, 1900

CHARACTER OF FOOD	PROTEIN			FAT			CARBOHYDRATES			ENERGY		
	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten	Served	Rejected	Eaten
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Grams	Calories	Calories	Calories
<i>Animal food</i>												
Meats and meat substitutes	20	2	18	19	1	18	14	1	13	316	22	294
Dairy products, etc.....	15	.....	15	36	.....	36	16	.....	16	462	.....	462
Total animal food.....	35	2	33	55	1	54	30	1	29	778	22	756
<i>Vegetable food</i>												
Breakfast foods.....	2	.....	2	.....	.....	.....	16	2	14	74	8	66
Breads.....	19	1	18	3	.....	3	110	7	103	557	33	524
Puddings, cakes, sauces, sugars, etc....	2	.....	2	2	.....	2	43	.....	43	203	.....	203
Vegetables and vegetable substitutes ...	8	1	7	3	.....	3	32	2	30	192	12	180
Total vegetable food.....	31	2	29	8	.....	8	201	11	190	1,026	53	973
Total food	66	4	62	63	1	62	231	12	219	1,804	75	1,729

TABLE 47

Food materials served in Dietary Study No. 56 of 104 attendants at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT					NUTRIENTS		
		Total food		Protein	Fat	Carbo- hydrates			
		Pounds	Kilograms						
							Grams	Grams	
<i>Animal food</i>									
Beef, boiled.....	2	27.00	12.25	3,172	2,927	.....		
“ roast.....	11	162.50	73.71	20,048	16,288	.....		
“ steak.....	17	33.00	14.97	2,844	2,140	.....		
“ “ hamburger.....	19	8.00	3.63	1,034	693	.....		
“ corned (canned).....	23	35.50	16.10	4,235	3,011	.....		
Mutton, scalloped.....	29	32.50	14.74	3,405	5,543	.....	2,138	
Pork, roast.....	32	13.50	6.12	1,084	4,152	.....		
“ ham.....	39	36.75	16.67	3,918	5,334	.....		
Fish, codfish balls.....	55	30.75	13.95	1,534	3,110	.....	3,362	
“ mackerel.....	48	34.50	15.65	3,192	1,221	.....		
Stew.....	68	132.00	59.88	5,149	4,131	.....	3,353	
Soup, pea.....	61	19.50	8.85	478	513	.....	1,194	
Gravy.....	77	66.50	30.16	452	422	.....	2,925	
Total meats and meat substitutes.....	.....	632.00	286.68	50,545	49,485	.....	12,972
Butter.....	79	126.75	57.49	575	48,870	.....	.....
Cheese.....	80	7.75	3.52	910	1,185	.....	84	
“ pot.....	81	1.75	.79	166	8	.....	34	

TABLE 47—Food materials served in Dietary Study No. 56, etc.—(Concluded)

KIND OF FOOD MATERIAL	Reference number	WEIGHT					
		Total food		NUTRIENTS			Carbo-hydrates
				Protein	Fat	Grams	
		Pounds	Kilograms	Grams	Grams	Grams	Grams
<i>Animal food—(Concluded)</i>							
Milk.....	78	293.50	133.13	4,393	5,325	6,657	
" condensed.....	82	176.10	79.88	9,106	12,222	11,263	
Eggs, boiled.....	84	8.25	3.74	524	449	.....
" fried.....	88	24.38	11.06	1,681	2,123	.....
" scrambled.....	87	59.75	27.10	3,577	3,659	488	
Total dairy products.....	.....	698.23	316.71	20,932	73,841	18,526	
Total animal food.....	.....	1,330.23	603.39	71,477	123,326	31,498	
<i>Vegetable food</i>							
Farina.....	106	28.75	13.04	261	39	1,852	
Hominy.....	113	143.50	65.09	911	65	8,527	
Oatmeal.....	95	42.25	19.17	594	249	2,319	
Total breakfast foods.....	.....	214.50	97.30	1,766	353	12,698	
Bread.....	126	372.00	168.74	15,524	2,194	89,600	
Pudding, custard.....	135	37.00	16.78	755	755	2,182	
Pie, peach.....	139	33.00	14.97	509	2,635	5,763	

Cake, ginger.....	138	39.00	17.69	1,026	1,061	9,270
Apple sauce.....	140	36.50	16.56	66	83	4,868
Peach sauce.....	144	68.50	31.07	497	93	6,494
Sugar.....	150	241.20	109.41	.....	.....	109,408
Syrup.....	151	6.25	2.84	.....	.....	1,984
Total puddings, cakes, sauces, sugars, etc.....	.....	461.45	209.32	2,853	4,627	139,939
Beans.....	158	25.00	11.34	998	374	2,381
Beets.....	160	7.50	3.40	65	3	384
Cabbage.....	170	167.25	75.87	1,517	303	5,255
Corn.....	172	65.50	29.71	921	327	5,853
Lettuce.....	174	2.25	1.02	12	4	29
Potatoes.....	180	87.25	39.58	871	3,443	7,203
Turnips.....	189	26.50	12.02	168	24	1,022
Turnip sauce.....	193	21.50	9.75	166	97	1,014
Macaroni and cheese.....	192	18.00	8.17	531	367	1,584
Rice.....	132	212.00	96.16	1,538	96	15,000
Total vegetables and vegetable substitutes.....	.....	632.75	287.02	6,787	5,038	39,705
Total vegetable food.....	.....	1,680.70	762.38	26,930	12,212	281,972
Total food.....	.....	3,010.93	1,365.77	98,407	135,538	313,470

TABLE 48

Food materials rejected in Dietary Study No. 56 of 104 attendants at Long Island State Hospital, Kings Park Department, during week beginning July 24, 1900

KIND OF FOOD MATERIAL	Reference number	WEIGHT						NUTRIENTS	
		Total food		Protein	Fat	Carbo- hydrates	Grams		
		Pounds	Kilograms						
<i>Animal food</i>									
Beef, boiled	2	4.25	1.93	499	461	.....	.....
“ roast	206	26.25	11.91	3,157	3,048	.....	.....
“ steak, hamburger	19	2.75	1.25	355	238	.....	.....
“ corned (canned)	23	5.00	2.27	596	424	.....	.....
Mutton, scalloped	29	4.00	1.81	419	682	.....	263	
Pork, ham	207	4.75	2.16	478	652	.....	.....
Fish, codfish balls	55	6.75	3.06	337	683	.....	738	
“ mackerel	48	8.00	3.63	740	283	.....	.....
Stew	68	9.00	4.08	351	282	.....	229	
Total meats and meat substitutes	.....	70.75	32.10	6,932	6,754	.....	1,230
Cheese, pot.	81	.25	.11	24	1	.....	5	
Eggs, boiled	84	2.25	1.02	143	122	.....	.....
“ scrambled	210	8.75	3.97	492	639	.....	171	
Total dairy products	.....	11.25	5.10	659	762	.....	176
Total animal food	.....	82.00	37.20	7,591	7,516	.....	1,406

Vegetable food

Farina	106	5.25	2.38	48	7	338
Hominy.....	230	21.25	9.64	135	10	1,282
Total breakfast foods ...	.....	26.50	12.02	183	17	1,620
Bread.....	126	39.75	18.03	1,659	234	9,574
Apple sauce	140	1.25	.57	2	3	167
Peach sauce	238	3.75	1.70	19	3	243
Total sauces.....	.....	5.00	2.27	21	6	410
Cabbage	255	17.25	7.83	164	31	556
Potatoes	256	1.75	.79	13	198	104
Turnips	189	3.75	1.70	24	3	145
Macaroni and cheese.....	192	8.00	3.63	236	163	704
Rice.....	237	17.25	7.83	125	8	1,260
Total vegetables and vegetable substitutes .....	.....	48.00	21.78	562	403	2,769
Total vegetable food.....	.....	119.25	54.10	2,425	660	14,373
Total food.....	.....	201.25	91.30	10,016	8,176	15,779

GENERAL REVIEW OF STATE HOSPITALS

Medical service

INSTITUTIONS	Number of physicians including internes	Ratio of physicians to patients	Annual per capita cost of medical service
Utica	6	1 to 235	\$7.41
Willard	11	1 to 205	7.384
Hudson River	11	1 to 190	8.381
Middletown	8	1 to 155	10.586
Buffalo	8	1 to 235	6.07
Binghamton	7	1 to 196	9.24
St. Lawrence	9	1 to 183	8.56
Rochester	5	1 to 113	18.76
Long Island, Kings Park	12	1 to 232	6.44
Long Island, Flatbush	6	1 to 193	8.651
Manhattan, East	12	1 to 160	10.033
Manhattan, West	14	1 to 202	7.83
Manhattan, Central Islip	6	1 to 217	6.655
Gowanda	3	1 to 114	20.777
Total	117	.....	\$8.851
Average .....	.....	1 to 192	.....

Based on average daily patient population, year ending September 30, 1901.

Employees

INSTITUTIONS	Total number of employees	Ratio of all employees to patients	Ratio of attendants to patients	Annual per capita cost of all employees
Utica.....	210	1 to 5.37	1 to 10.17	\$53.95
Willard.....	466	1 to 4.84	1 to 8.14	59.36
Hudson River.....	432	1 to 4.83	1 to 8.1	59.74
Middletown.....	256	1 to 4.9	1 to 8.3	63.031
Buffalo.....	326	1 to 5.73	1 to 9.8	51.30
Binghamton.....	296	1 to 4.6	1 to 7.4	63.01
St. Lawrence.....	349	1 to 4.71	1 to 6.8	58.37
Rochester.....	120	1 to 4.7	1 to 7.81	62.81
Long Island, Kings Park	533	1 to 5.22	1 to 7.95	52.76
Long Island, Flatbush ..	220	1 to 5.26	1 to 7.57	55.01
Manhattan, East.....	333	1 to 5.78	1 to 8.26	58.75
Manhattan, West.....	457	1 to 6.2	1 to 9.37	44.68
Manhattan, Central Islip.	213	1 to 6.95	1 to 11.3	52.473
Gowanda.....	79	1 to 4.4	1 to 11	70.97
Total.....	4,267	.....	.....	.....
Average.....	...	1 to 5.26	1 to 8.25	\$54.806

Based on average daily patient population, year ending September 30, 1901, and including all employees outside of manufacturing department.

Fuel and light

INSTITUTIONS	Total annual cost	Annual per capita cost	Total number of tons of coal consumed	Average purchase price per ton
Utica.....	\$14,473 37	\$12.81	4,785.71	\$3.06
Willard.....	29,733 82	13.179	11,172	2.594
Hudson River.....	41,970 92	20.091	11,970	3.432
Middletown.....	15,004 72	12.071	5,104.9	2.796
Buffalo ..	22,957 91	12.24	12,889½	1.72
Binghamton.....	24,534 25	17.83	11,146	2.47
St. Lawrence.....	39,848 59	24.209	10,906	3.609
Rochester.....	9,776 50	17.31	3,225	3.03
Long Island, K'gs Pk	57,270 04	20.578	16,247⅓	3.46
Long Island, Flatbush	9,801 80	8.464	2,706½	3.621
Manhattan, East	14,786 03	7.68	6,769	2.197
Manhattan, West	39,516 21	14.194	14,872	2.42
Manhattan, Cent. Islip	12,706 49	9.857	6,255	2.04
Gowanda.....	8,094 43	23.687	3,842⅞	2.044
Total.....	\$340,475 08	.....	121,891.39	.....
Average.....	.....	\$15.159	.....	\$2.793

Recoveries—Exclusive of transfers

INSTITUTIONS	On number admitted	On average daily population	On whole number treated	On number discharged
Utica.....	24.23	6.38	5.11	20.00
Willard.....	20.53	2.39	2.12	17.53
Hudson River.....	35.02	7.95	6.47	35.39
Middletown.....	43.08	7.1	6.26	48.1
Buffalo.....	21.79	4.8	3.92	23.67
Binghamton.....	33.79	5.37	4.61	30.83
St. Lawrence.....	30.53	5.28	4.5	33.33
Rochester.....	24.03	8.35	6.51	26.34
Long Island, Kings Park.....	30.06	4.85	4.2	31.76
Long Island, Flatbush.....	21.17	4.06	3.39	24.23
Manhattan, East.....	15.83	6.03	4.5	18.92
Manhattan, West.....	26.50	7.57	5.98	45.96
Manhattan, Central Islip.....	.....	.....	.....	.....
Gowanda.....	18.82	4.68	3.82	30.19
Total.....	26.5	5.38	4.48	27.79

Deaths—Exclusive of transfers

INSTITUTIONS	On number admitted	On average daily population	On whole number treated	On number discharged
Utica.....	32.42	8.42	6.74	36.58
Willard.....	65.77	7.66	6.8	56.35
Hudson River.....	44.09	10.	8.15	44.56
Middletown.....	33.33	5.52	4.8	36.14
Buffalo.....	33.9	7.41	6.1	44.55
Binghamton.....	52.05	8.28	7.11	45.23
St. Lawrence.....	38.34	7.59	6.46	47.97
Rochester.....	29.8	10.12	8.08	33.3
Long Island, Kings Park.....	45.53	7.33	6.36	48.00
Long Island, Flatbush.....	40.54	7.77	6.49	46.39
Manhattan, East.....	38.74	14.75	11.01	46.33
Manhattan, West.....	29.27	8.36	6.6	50.76
Manhattan, Central Islip.....	.....	3.103	2.965	74.
Gowanda.....	25.88	6.43	5.26	41.51
Total.....	40.95	8.32	6.92	42.94

Statement showing average purchase price and annual per capita cost of staple articles of consumption in the State Hospitals during the year ending September 30, 1901

ARTICLES	UTICA		WILLARD		HUDSON RIVER		MIDDLETOWN	
	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost
Fresh meats, per pound	\$0.0696	\$12.51	\$0.0669	\$12.545	\$0.0757	\$18.523	\$0.087	\$14.302
Poultry, per pound	.107	.235	.07765	.338	.1104	.468	.123	.56
Wheat flour, per barrel	3.46	4.64	3.4577	5.069	3.795	4.924	3.978	3.251
Butter, per pound	.190	7.54	.20515	8.143	.2017	7.954	.204	8.187
Cheese, per pound	.102	.942	.09872	.853	.0985	.845	.106	.877
Milk, per gallon	.10	3.058	.0907	5.09	.1195	6.580	.122	8.377
Eggs, per dozen	.15	1.41	.16403	2.628	.1637	3.053	.177	3.601
Ten, per pound	.239	1.811	.24135	1.638	.2414	.782	.241	.348
Coffee, per pound	.1181	1.48	.11825	1.620	.1183	1.612	.119	1.365
Sugar, per hundredweight	5.48	2.83	5.529	3.023	5.42	2.857	5.50	3.008
Liquor, per gallon	1.99	.236	1.30196	.117	1.75	.218	4.00	.081

Statement showing average purchase price, etc.—(Continued)

ARTICLES	BUFFALO		BINGHAMTON		ST. LAWRENCE		ROCHESTER		LONG ISLAND, KINGS PARK	
	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost
Fresh meats, per pound.....	\$0.07218	\$11.31	\$0.0653	\$12.769	\$0.0819	\$14.43	\$0.0677	\$12.07	\$0.072	\$11.108
Poultry, per pound.....	.1212	.455	.125	.422	.135	.716	.1302	.309	.112	.402
Wheat flour, per barrel.....	3.624	4.50	3.469	4.538	3.639	4.639	3.458	4.502	3.342	4.55
Butter, per pound.....	.209	8.20	.208	8.38	.213	8.473	.209	8.301	.207	8.11
Cheese, per pound.....	.103	.76	.096	.786	.103	.376	.102	1.028	.0952	.951
Milk, per gallon.....	.1168	4.82	.132	7.11	.10	3.647	.0968	5.224	.....	.....
Eggs, per dozen.....	.....	.....	.167	3.146	.121	2.779	.168	1.834	.....	.....
Tea, per pound.....	.241	.99	.24	.787	.241	2.774	.241	.8303	.1656	2.796
Coffee, per pound.....	.118	1.136	.117	1.619	.118	1.623	.1184	1.5601	.2415	.617
Sugar, per hundredweight.....	5.48	2.88	5.45	2.901	5.52	2.85	5.51	3.0423	5.349	2.467
Liquor, per gallon.....	1.81	.105	1.719	.269	1.819	.149	1.7603	.2401	1.72	.062

Statement showing average purchase price, etc.—(Concluded)

ARTICLES	LONG ISLAND, FLATBUSH		MANHATTAN, EAST		MANHATTAN, WEST		MANHATTAN, CENTRAL ISLIP		GOWANDA	
	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost	Average purchase price	Annual per capita cost
Fresh meats, per pound.....	\$0.07203	\$11.915	\$0.0686	\$12.884	\$11.927	\$12.055	\$0.0705	\$11.545	\$0.078	\$11.545
Poultry, per pound.....	.11307	.4198	.1116	.366	.341	.1112	.097	.455	.097	.455
Wheat flour, per barrel.....	3.943	3.81	3.3135	4.63	4.224	4.859	3.312	3.60	3.514	3.60
Butter, per pound.....	.26574	7.357	.2076	8.4361	8.014	7.232	.2108	8.636	.209	8.636
Cheese, per pound.....	.07607	.6548	.092	.9165	.512	.896	.1004	.325	.104	.325
Milk, per gallon.....	.15	2.362	.1632	.154	.32	.....	.....	.053	.16	.053
Eggs, per dozen.....	.1653	2.36	.1637	2.763	2.755	.....	.....	.152	.165	.152
Tea, per pound.....	.2413	.811	.2413	.80	.788	2.342	.1683	.241	.241	.241
Coffee, per pound.....	.1172	1.432	.118	1.587	1.559	.806	.2414	.705	.116	.705
Sugar, per hundredweight.....	5.35	2.498	5.38	2.885	2.81	1.582	5.35	3.113	5.575	3.113
Liquor, per gallon.....	1.725	.129	2.05	.022	.03	.0133	1.72	.21	1.67	.21

COST OF MAINTENANCE OR FIXED CHARGES OF THE STATE HOSPITALS

Statement showing yearly, weekly and daily per capita cost for fixed charges or maintenance of State hospitals for the year beginning October 1, 1900 and ending September 30, 1901

Daily average number of patients, 22,461. Yearly per capita, \$167.70

CLASSIFICATION	Total expenditures	Yearly per capita	Monthly per capita	Weekly per capita	Daily per capita
1 Officers' Salaries.....	\$247,721 82	\$11.03	\$0.92	\$0.2121	\$0.0301
2 Employees' wages:					
Administrative department.....	92,305 75	\$1.11	\$0.342	\$0.079	\$0.0113
Financial department.....	4,326 29	2.00	.167	.0355	.0055
Ward service.....	682,407 82	30.39	2.533	.5845	.0833
Domestic service.....	73,407 82	1.12	.093	.0215	.0031
Kitchen service.....	72,583 14	3.24	.27	.0623	.0089
Bakery service.....	14,583 02	.65	.054	.0125	.0018
Meat cutters.....	8,529 31	.38	.032	.0073	.001
Laundry service.....	34,017 82	1.50	.126	.0291	.0041
Engineers' department.....	127,936 07	5.70	.475	.1096	.0156
Building department.....	52,059 77	2.31	.195	.0438	.0064
Industrial department.....	16,205 91	.72	.06	.0138	.0019
Farm and grounds department.....	56,324 41	2.51	.209	.0433	.0069
Railway department.....	1,614 00	.07	.006	.0013	.0002
New York city office, Manhattan State Hospital and steamboat department.....	6,569 60	.29	.024	.0056	.0008
3 Provisions and stores:					
Farinaceous foods.....	\$148,977 72	\$55.03	\$4.586	\$1.0583	\$0.1508
Yeast.....	3,428 70	.15	.012	.0029	.0004
	\$152,406 42	\$6.78	\$0.565	\$0.1304	\$0.0186
Fresh meats.....	\$288,775 29	\$12.63	\$1.063	\$0.2429	\$0.0346
Poultry.....	9,227 80	.41	.034	.0079	.0011
Salt and smoked meats.....	56,768 48	2.53	.211	.0486	.0069
Fresh fish.....	38,481 38	1.71	.143	.0329	.0047
Salt fish.....	14,562 21	.65	.054	.0125	.0018
	402,816 09	\$17.93	\$1.405	\$0.3448	\$0.0491

COST OF MAINTENANCE OR FIXED CHARGES OF THE STATE HOSPITALS—(Continued)

CLASSIFICATION	Total expenditures		Yearly per capita	Monthly per capita	Weekly per capita	Daily per capita
3 Provisions and stores—(Continued):						
Fresh vegetables.....	\$49,771 74		\$2.22	\$0.185	\$0.0427	\$0.0061
Canned vegetables.....	15,661 83	\$65,433 57	.70	.058	.0135	.0019
			\$2.92	\$0.243	\$0.0562	\$0.008
Fresh fruits.....	\$12,933 96		\$0.58	\$0.048	\$0.0111	\$0.0016
Dried fruits.....	14,880 49		.43	.055	.0127	.0018
Preserves and jellies.....	1,312 82		.06	.005	.0012	.0002
		29,127 27	\$1.30	\$0.108	\$0.025	\$0.0036
Dairy products.....	\$344,784 70	344,784 70	\$15.35	\$1.279	\$0.2952	\$0.0421
Wet groceries.....	14,704 45		\$0.65	\$0.054	\$0.0125	\$0.0018
Dry groceries.....	117,718 28		5.25	4.38	.0009	.0143
Condiments.....	1,572 35		.07	.006	.0013	.0002
		133,995 02	\$5.97	\$0.498	\$0.1147	\$0.0163
Total food supplies	\$1,128,562 13		\$50.25	\$4.188	\$0.9663	\$0.1377
Water and ice.....	\$21,902 03	21,902 03	\$0.98	\$0.081	\$0.0189	\$0.0027
Laundry supplies.....	\$10,945 67	10,945 67	\$0.48	\$0.03	\$0.0092	\$0.0013
Crockery and glassware.....	\$11,003 24		\$0.49	\$0.041	\$0.0094	\$0.0014
Tin and iron ware.....	7,262 05		.32	.021	.0062	.0009
Cutlery and plated ware.....	1,125 85		.05	.004	.0013	.0001
Wooden ware.....	1,530 67		.07	.005	.0013	.0002
Household supplies.....	24,654 87		1.07	.091	.0212	.0030
Toilet articles.....	4,338 49		.19	.016	.0037	.0005
		49,915 17	\$2.22	\$0.185	\$0.0427	\$0.0061
		42,069 03	1.87	.156	.036	.0051
Commutation.....	\$42,069 03	\$1,253,394 03	\$55.80	\$0.465	\$1.0731	\$0.1529
4 Ordinary repairs:						
Engineers' department.....	26,404 43		\$1.17	\$0.098	\$0.0225	\$0.0032
Carpenters' department.....	13,621 80		.61	.051	.0117	.0017
Painting department.....	15,268 56		.68	.057	.0131	.0019

Masons' department.....	6,005 35	.27			.0052	
Electrical department.....	4,475 73	.20			.0038	
Tinsmiths' department.....	4,793 66	.21			.0040	
Railway department.....	1,174 80	.05			.0010	
	71,734 33	\$3.19	\$0.206		\$0.0613	\$0.0087
5 Farms and grounds :						
Farm feed.....	\$42,295 81	\$1.79	\$0.149		\$0.0344	\$0.0049
Wagons, sleighs and harness.....	3,328 31	.32	.027		.0002	.0009
Farm and garden implements.....	3,308 96	.18	.015		.0005	.0005
Lawns, roads and grounds.....	16,324 44	.71	.059		.0021	.0003
Farm supplies.....	3,304 88	.74	.062		.0002	.0002
Agricultural supplies.....	3,304 23	.15	.012		.0003	.0004
Stables and stables.....	5,021 27	.29	.02		.0006	.0007
Livestock.....	13,178 68	.59	.019		.0013	.0016
Rentals.....	1,260 00	.06	.005		.0012	.0002
	93,898 60	\$4.18	\$0.348		\$0.0801	\$0.0115
6 Clothing.....	\$184,094 30	\$8.20	\$0.683		\$0.1577	\$0.0225
7 Furniture and bedding :						
Furniture.....	\$25,506 35	\$1.13	\$0.091		\$0.0217	\$0.0031
Bedding.....	40,245 64	1.79	.15		.0345	.0019
Window furniture.....	2,885 51	.13	.011		.0025	.0001
Table linen.....	17,028 79	.76	.063		.0146	.0021
	85,446 29	\$3.81	\$0.318		\$0.0733	\$0.0105
8 Books and stationery :						
Stationery supplies.....	\$23,153 06	\$1.03	\$0.086		\$0.0198	\$0.0028
Books.....	2,103 36	.10	.008		.0019	.0003
Periodicals.....	1,415 62	.06	.005		.0012	.0002
	26,672 04	\$1.19	\$0.099		\$0.0229	\$0.0033
9 Fuel and light.....	\$50,885 02	\$5.62	\$1.302		\$0.3004	\$0.0128
10 Medical supplies :						
Medicines.....	\$18,425 48	\$0.82	\$0.068		\$0.0158	\$0.0023
Medical and surgical supplies.....	10,073 90	.45	.038		.0087	.0012
Laboratory supplies.....	1,322 95	.09	.007		.0017	.0002
	30,424 33	\$1.36	\$0.113		\$0.0262	\$0.0037

COST OF MAINTENANCE OR FIXED CHARGES OF THE STATE HOSPITALS---(Concluded)

CLASSIFICATION	Total expenditures	Yearly per capita	Monthly per capita	Weekly per capita	Daily per capita
11 Miscellaneous:					
Traveling expenses.....	\$6,632 49	\$0.30	\$0.025	\$0.0058	\$0.0008
Entertainment of patients.....	30,297 60	1.35	.113	.026	.0047
Supply transportation.....	24,487 12	1.10	.091	.0219	.003
Messages.....	7,015 15	.31	.026	.006	.0009
Miscellaneous.....	87,154 21	3.88	.323	.0746	.0106
		\$6.93	\$0.578	\$0.1333	\$0.019
12 Transportation of patients.....	\$9,642 32	\$1.36	\$0.113	\$0.0262	\$0.0037
Grand total.....		\$107.70	\$13.98	\$3.225	\$0.4595

BY THE COMMISSION.

T. E. MCGARR,
Secretary.

ALBANY, November 11, 1901.

STATISTICS

TABLE No. 1

Showing the number of registered insane remaining in the State hospitals October 1, 1900, the number admitted on original commitments and by transfers during the year, the total number under treatment and the number remaining September 30, 1901

	UTICA STATE HOSPITAL			WILLARD STATE HOSPITAL			HUDSON RIVER STATE HOSPITAL			MIDDLETOWN STATE HOMEOPATHIC HOSPITAL		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Remaining October 1, 1900.....	549	558	1,107	1,122	1,144	2,266	982	1,109	2,091	588	622	1,210
Admitted during year ending September 30, 1901.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
On original commitments:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
From residences.....	150	143	293	140	108	248	231	220	451	86	115	201
By transfers from county houses.....	.....	.....	.....	7	8	15	5	3	8	1	2	3
By transfers from other institutions for insane.....	2	6	8	8	6	14	10	5	15	7	4	11
Total number under treatment during year.....	701	707	1,408	1,277	1,266	2,543	1,238	1,337	2,565	682	743	1,425
Daily average population.....	559	579	1,128	1,119	1,137	2,256	979	1,110	2,089	598	645	1,243
Capacity of institution.....	530	561	1,091	939	966	1,905	933	951	1,884	569	535	1,104
Discharged during the year:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
As recovered.....	36	36	72	27	37	51	93	73	166	95	56	89
As improved.....	20	20	47	21	36	57	29	37	66	18	9	27
As not insane.....	21	16	43	15	7	22	19	9	28	2	1	3
Died.....	3	.....	3	1	.....	1	.....	.....	.....	1	.....	1
Whole number discharged during the year.....	56	39	95	83	90	173	110	101	211	36	32	68
Remaining October 1, 1901.....	149	111	260	147	160	307	251	220	471	90	98	188
Total.....	552	596	1,148	1,130	1,166	2,296	977	1,117	2,094	592	645	1,237

Table No. 1—(Continued)

Showing the number of registered insane remaining in the State hospitals October 1, 1900, the number admitted on original commitments and by transfers during the year, the total number under treatment and the number remaining September 30, 1901

	BUFFALO STATE HOSPITAL			BINGHAMTON STATE HOSPITAL			ST. LAWRENCE STATE HOSPITAL			ROCHESTER STATE HOSPITAL		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Remaining October 1, 1900.....	843	1,037	1,880	641	735	1,376	810	796	1,606	248	302	550
Admitted during year ending September 30, 1901.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
On original commitments:												
From residences.....	220	180	400	114	96	210	165	119	285	102	95	197
By transfers from county houses.....	2	3	5	3	4	7	2	2	4	3	6	11
By transfers from other institutions for insane.....	7	3	10	5	2	7	37	.....	37	4	5	9
Total number under treatment during year.....	1,071	1,222	2,293	765	837	1,602	1,015	917	1,932	359	408	767
Daily average population.....	847	1,029	1,876	650	726	1,376	848	798	1,646	250	314	564
Capacity of institution.....	714	917	1,631	631	669	1,300	902	750	1,652	253	2	500
Discharged during the year:												
As recovered.....	46	44	90	28	46	74	44	43	87	21	21	50
As improved.....	43	34	77	21	15	36	13	16	29	27	21	48
As unimproved.....	35	20	55	14	10	24	8	12	20	15	11	26
As not insane.....	13	5	18	2	2	4	.....	.....	.....	.....	.....	.....
Died.....	81	59	140	57	57	114	67	58	125	31	31	62
Whole number discharged during the year.....	218	162	380	122	130	252	132	129	261	94	92	186
Remaining October 1, 1901.....	853	1,060	1,913	6	707	1,350	883	788	1,671	265	316	581

Table No. 1—(Continued)

Showing the number of registered insane remaining in the State hospitals October 1, 1900, the number admitted on original commitments and by transfers during the year, the total number under treatment and the number remaining September 30, 1901

	LONG ISLAND HOSPITAL, KINGS PARK			LONG ISLAND HOSPITAL, FLAT- BUSH			MANHATTAN HOSPITAL, EAST			MANHATTAN HOSPITAL, WEST		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Remaining October 1, 1900.....	1,198	1,538	2,736	387	756	1,143	1,847	.....	1,847	199	2,533	2,732
Admitted during year ending September 30, 1901.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
On original commitments:												
From residences.....	21	232	445	103	109	217	660	.....	660	.....	721	721
By transfers from county houses.....	5	3	8	3	2	5	40	.....	40	.....	42	42
By transfers from other institutions for insane.....	15	13	28	9	13	22	33	.....	33	.....	24	33
Total number under treatment during year.....	1,431	1,776	3,207	507	880	1,387	2,580	.....	2,580	208	3,320	3,528
Daily average population.....	1,217	1,566	2,783	391	767	1,158	1,925	.....	1,925	199	2,585	2,784
Capacity of institution.....	1,023	1,307	2,330	337	638	975	1,011	449	1,460	.....	1,569	1,569
Discharged during the year:												
As recovered.....	68	67	135	22	25	47	116	.....	116	3	208	211
As improved.....	27	37	64	11	16	27	118	.....	118	2	201	203
As unimproved.....	12	6	18	13	15	28	90	.....	90	.....	39	39
As not insane.....	3	1	4	1	2	3	5	.....	5	.....	6	6
Died.....	108	96	204	43	47	90	284	.....	284	3	280	233
Whole number discharged during the year.....	218	207	425	90	104	194	613	.....	613	8	684	692
Remaining October 1, 1901.....	1,213	1,569	2,782	417	776	1,193	1,967	.....	1,967	200	2,636	2,836

Table No. 1—(Concluded)

Showing the number of registered insane remaining in the State hospitals October 1, 1900, the number admitted on original commitments and by transfers during the year, the total number under treatment and the number remaining September 30, 1901

	MANHATTAN STATE HOSPITAL, CENTRAL ISLIP			GOWANDA STATE HOSPITAL			ALL HOSPITALS		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Remaining October 1, 1900.....	855	398	1,243	153	158	311	10,422	11,666	22,088
Admitted during year ending September 30, 1901.....									
On original commitments:									
By transfers from county houses.....				44	41	85	2,234	2,179	4,413
By transfers from other institutions for insane.....	81	25	106	11	11	22	74	74	148
Total number under treatment during year.....	936	413	1,349	208	210	418	12,968	14,036	27,004
Daily average population.....	897	392	1,289	168	174	342	10,637	11,822	22,459
Capacity of institution.....	716	261	977	125	135	260	8,683	9,955	18,638
Discharged during the year:									
As recovered.....	1	.....	1	11	6	17	549	660	1,209
As improved.....	7	4	11	3	8	11	367	454	821
As unimproved.....	2	.....	2	5	4	9	257	150	407
As not insane.....	.....	.....	.....	1	.....	1	30	15	45
Died.....	30	10	40	21	8	29	1,010	858	1,868
Whole number discharged during the year.....	40	14	54	41	26	67	2,213	2,137	4,350
Remaining October 1, 1901.....	896	399	1,295	167	184	351	10,755	11,899	22,654

TABLE No. 2
General Statement of the State Hospitals October 1, 1901

	Utica State Hospital	Willard State Hospital	Hudson River State Hospital	Middletown State Homeopathic Hospital	Buffalo State Hospital	Binghamton State Hospital	St. Lawrence State Hospital	Rochester State Hospital
Date of opening.....	1843	1869	1871	1874	1886	1881	1890	1891
Total acreage of grounds and buildings.....	438	1,107	756	281	183	1,060	900	155
Value of real estate, including buildings.....	\$1,085,000 00	\$1,396,245 50	\$2,421,287 78	\$1,137,646 00	\$2,500,000 00	\$60,000 00	\$2,500,500 00	\$269,079 02
Value of personal property.....	95,000 00	211,353 51	222,352 23	85,000 00	107,397 51	170,000 00	138,200 00	31,254 34
Acreage under cultivation.....	325	650	655	210	70	630	421	105
Receipts during year, maintenance fund:								
Balance on hand October 1, 1900.....	*	\$412 21	\$181 24	\$135 36	\$1,193 53	\$9,412 77	\$395 37	\$2,979 69
From State Treasury for maintenance on estimates 1 to 12 inclusive.....	\$175,338 00	355,110 00	370,280 00	217,002 55	299,135 00	233,451 57	281,220 00	110,183 13
From private patients.....	11,082 58	448 14	13,446 01	40,927 15	6,328 47	3,175 08	1,875 41	514 96
From reimbursing patients.....	10,990 14	20,705 20	14,363 44	13,396 37	10,371 64	7,340 23	8,321 64	7,287 28
From all other sources.....	5,080 35	8,652 51	11,878 46	4,172 36	3,725 85	1,348 74	4,891 74	2,870 98
Total receipts for maintenance.....	\$202,491 07	\$385,358 12	\$410,317 75	\$275,634 89	\$323,754 03	\$256,548 97	\$296,704 16	\$23,836 04
Total receipts from State Commission in Lunacy for extraordinary improvements.....	\$14,712 32	\$20,351 75	\$89,615 80	\$89,752 06	\$7,504 98	\$21,450 29	\$23,227 95	\$21,518 91
Total receipts from manufacturing fund.....	\$19,026 62	.....	.....	.....	.....	\$1,940 58	\$23,758 85	\$11,612 08
Disbursements during year for maintenance:								
Estimate No. 1. For officers' salaries.....	\$13,098 42	\$20,289 80	\$20,786 04	\$17,311 68	\$20,331 02	\$16,545 24	\$17,948 22	\$14,498 18
Estimate No. 2. For wages.....	60,908 84	129,313 94	125,334 74	78,342 49	92,231 43	87,047 36	93,063 55	35,370 32
Estimate No. 3. For provisions and stores.....	53,228 96	110,292 97	126,574 82	78,677 19	114,601 71	69,128 63	87,531 02	31,819 99
Estimate No. 4. For ordinary repairs.....	3,355 63	8,262 58	7,094 19	4,306 24	3,500 10	4,958 01	7,387 61	3,783 90
Estimate No. 5. For farm and grounds.....	3,350 63	11,297 60	9,454 10	5,035 06	6,500 10	6,486 03	6,316 24	5,658 72
Estimate No. 6. For fuel and clothing.....	9,921 89	21,191 25	15,111 75	5,631 49	16,468 25	10,708 20	11,100 23	3,191 15
Estimate No. 7. For furniture and bedding.....	4,306 04	8,111 22	8,029 83	4,657 88	10,522 70	6,230 62	4,597 01	965 27
Estimate No. 8. For books and stationery.....	1,612 97	2,675 03	2,704 20	1,126 91	1,591 67	1,649 13	39,818 59	10,092 28
Estimate No. 9. For fuel and light.....	14,433 37	29,733 82	41,970 92	15,004 72	22,951 91	25,448 21	2,374 55	995 54
Estimate No. 10. For fuel and light.....	2,005 02	3,016 52	3,204 68	1,099 69	3,953 46	1,349 43	2,374 55	995 54
Estimate No. 11. For miscellaneous expenses.....	5,200 13	10,315 09	12,692 59	6,512 03	6,782 81	1,583 17	7,981 60	4,322 90
Estimate No. 12. For transportation.....	2,405 50	4,589 85	5,412 65	1,585 59	2,250 21	2,559 34	4,338 21	1,213 60
Total disbursements, estimates 1 to 12 inclusive.....	\$176,686 79	\$359,090 46	\$378,361 51	\$219,380 70	\$301,086 74	\$241,061 41	\$283,675 22	\$114,395 01

* Overdraft, \$243.31. \$18,136.03 advanced by Comptroller to meet unpaid March claims at time of bank failure not included.

Table No. 2.—General Statement of the State Hospitals October 1, 1901—(Continued)

	Utica State Hospital	Willard State Hospital	Hudson River State Hospital	Middletown State Homeopathic Hospital	Buffalo State Hospital	Elmhurst State Hospital	St. Lawrence State Hospital	Rochester State Hospital
Remitted to State Treasurer, sundry receipts under Chap. 580, Laws 1899.....	\$22,817 01	\$18,854 35	\$28,266 33	\$54,670 67	\$17,132 61	\$10,900 09	\$10,704 79	\$7,882 78
Total disbursements during year for extraordinary improvements under appropriations by State Commission in Lunacy.....	\$14,312 32	\$20,951 75	\$39,615 80	\$39,752 06	\$7,501 98	\$21,450 29	\$23,214 38	\$21,518 94
Total disbursements during year, manufacturing fund.....	\$51,110 00	.....	\$160 00	.....	.....	.....	\$21,774 70	\$13,402 26
Balances October 1, 1901:								
General maintenance fund.....	\$2,743 95	\$2,867 68	\$3,559 31	\$1,583 02	\$5,534 68	\$1,587 47	\$2,324 15	\$1,657 25
Appropriations by State Commission in Lunacy for extraordinary improvements.....	7,940 69	.....	.....	.....	.....	.....	1,997 72	1,500 39
Manufacturing fund.....	.....	.....	.....	.....	.....	.....	.....	.....
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive.....	3.01	3.06	3.47	3.394	3.086	3.369	3.312	3.388
Maximum rate of wages paid attendants:								
Men.....	\$24 00	\$33 00	\$33 00	\$34 00	\$34 00	\$45 00	\$31 00	\$33 00
Women.....	18 00	28 00	28 00	29 00	29 00	40 00	28 00	30 00
Minimum rate of wages paid attendants:								
Men.....	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00
Women.....	14 00	14 00	14 00	14 00	14 00	14 00	14 00	14 00
Proportion of day attendants to average daily population.....	1 to 10.54	1 to 11.06	1 to 9	1 to 10.3	1 to 11.95	1 to 8.5	1 to 8.4	1 to 9.737
Proportion of night attendants to average daily population.....	1 to 53.76	1 to 64.46	1 to 53	1 to 46	1 to 55.18	1 to 51	1 to 53.09	1 to 51.343
Percentage of daily patient population engaged in some kind of useful occupation.....	52.18	51.52	73	32	64	44	65.6	71.34
Estimated value of farm and garden products during year.....	\$25,630 96	\$31,757 97	\$24,407 12	\$3,000 00	\$4,937 02	\$24,007 30	\$26,084 30	\$8,568 47
Estimated value of articles made on manufacturing by patients during year.....	10,000 00	20,387 17	27,448 48	4,500 00	21,112 65	17,636 00	15,983 82	9,518 99

Table No. 2.—General Statement of the State Hospitals October 1, 1901—(Continued)

	Long Island State Hospital, Kings Park	Long Island State Hospital, Flushing	Manhattan State Hospital, East	Manhattan State Hospital, West	Manhattan State Hospital, Central Islip	Gowanda State Homeopathic Hospital	All hospitals
Date of opening	1895	1895	1871	1896	1889	1898	
Total acreage of grounds and buildings	890	30	125	126	1,000	500	7,641
Value of real estate, including buildings	\$3,700,000 00	.....	\$1,630,055 40	\$2,352,000 00	\$1,659,260 72	\$479,139 71	\$22,130,192 13
Value of personal property	180,609 08	.....	133,340 84	135,080 00	110,503 85	43,715 82	1,742,857 12
Acreage under cultivation	237	12	49	45	285	309	4,403
Receipts during year, maintenance fund :							
From State Treasury for maintenance on estd- butes 1 to 12 inclusive	*	\$1,294 56	.....	†	.....	\$33 39	† \$19,068 12
From private patients	\$458,500 00	189,872 63	\$348,285 00	\$409,725 00	\$211,165 00	77,471 00	3,736,741 88
From reimbursing patients	11,804 15	8,982 80	5,468 52	5,412 92	384 43	852 65	78,651 05
From all other sources	4,898 78	7,474 08	9,854 27	2,381 18	669 11	2,115 70	137,205 98
Total receipts for maintenance	\$475,202 93	\$207,624 07	\$363,607 79	\$417,519 10	\$212,218 54	\$82,671 96	\$1,033,521 92
Total receipts from State Commission in Lunacy for extraordinary improvements	\$55,700 79	\$6,394 16	\$22,993 80	\$68,657 29	\$460,754 76	\$17,132 52	\$819,966 91
Total receipts from manufacturing fund	\$7,714 75	\$965 48	\$35,739 01	.....	.....	.....	\$120,766 37
Disbursements during year for maintenance :							
Estimate No. 1. For officers' salaries	\$31,935 63	\$3,813 67	\$22,594 77	\$24,815 38	\$12,044 98	\$10,968 70	\$247,721 82
Estimate No. 2. For wages	157,510 74	74,703 34	112,759 01	124,376 52	67,640 42	23,583 79	1,236,038 84
Estimate No. 3. For provisions and stores	20,367 73	3,284 14	6,015 31	6,385 87	3,449 71	19,083 15	1,253,394 03
Estimate No. 4. For ordinary repairs	23,475 07	7,819 27	24,427 73	17,290 30	12,896 98	9,271 15	93,896 60
Estimate No. 5. For farm and grounds	8,186 18	6,599 92	24,239 81	7,028 81	3,113 53	3,108 52	184,094 30
Estimate No. 6. For clothing	5,599 44	2,969 51	2,969 51	2,883 63	1,457 43	1,678 45	85,466 29
Estimate No. 7. For furniture and bedding	57,275 04	10,506 52	19,365 37	37,511 89	18,656 71	7,665 69	256,072 04
Estimate No. 8. For books and stationery	3,056 62	1,451 34	3,768 97	3,743 46	811 95	8,094 43	850,885 02
Estimate No. 9. For fuel and light	18,333 75	7,516 58	24,473 33	26,114 19	11,837 60	4,590 50	30,421 33
Estimate No. 10. For medical supplies	2,593 95	938 57	754 65	848 36	62 45	1,139 39	155,646 57
Estimate No. 11. For miscellaneous expenses							30,642 32
Estimate No. 12. For transportation							
Total disbursements, estimates 1 to 12 In- clusive	\$464,329 66	\$193,500 52	\$343,367 57	\$406,093 22	\$207,517 88	\$78,167 80	\$3,766,615 49

* Overdraft, \$4,386.38. † Deficit, \$96.38. ‡ \$16,136.03 advanced by Comptroller to meet unpaid March claims at time of bank failure at Willard not included.

Table No. 2—General Statement of the State Hospitals October 1, 1901—(Concluded)

	Long Island State Hospital, Kings Park	Long Island State Hospital, Flushing	Manhattan State Hospital, East	Manhattan State Hospital, West	Manhattan State Hospital, Central Islip	Gowanda State Hospital	All hospitals
Remitted to State Treasurer, sundry receipts, under Chap. 580, Laws of 1899.....	\$12,403 80	\$9,284 55	\$5,729 49	.....	\$502 82	\$3,239 99	\$242,389 35
Total disbursements during year for extra- ordinary improvements under apportion- ments by State Commission in Lunacy.....	\$55,922 77	\$6,394 16	\$22,993 30	\$68,657 29	\$460,754 76	.....	\$803,042 80
Total disbursements during year, manufac- turing fund.....	\$8,560 00	\$213 33	\$20,678 34	.....	.....	.....	\$115,358 63
Balances October 1, 1901:							
General maintenance fund.....	\$3,666 91	\$4,227 08	\$5,105 16	\$3,798 57	\$1,330 57	\$1,210 44	\$40,529 33
Apportionments by State Commission in Lunacy for extraordinary improvements....	22,719 21	5,464 30	.....	.....	.....	.....	28,183 51
Manufacturing fund.....	*845 25	2,565 75	5,660 67	.....	.....	.....	19,665 22
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive.....	3,208	3,213	3,420 8	2,755	3 08	4 39	3,425
Maximum rate of wages paid attendants:							
Men.....	\$30 00	\$30 00	\$35 00	\$35 00	\$35 00	\$27 00	.....
Women.....	25 00	25 00	.....	30 00	30 00	25 00	.....
Minimum rate of wages paid attendants:							
Men.....	20 00	20 00	20 00	20 00	20 00	20 00	.....
Women.....	14 00	14 00	.....	14 00	14 00	14 00	.....
Proportion of day attendants to average daily population.....	1 to 9.9	1 to 9.84	1 to 10	1 to 12.15	1 to 11.31	1 to 12.65	.....
Proportion of night attendants to average daily population.....	1 to 48.8	1 to 25	1 to 48	1 to 40.94	1 to 58.59	1 to 68.34	.....
Percentage of daily patient population engaged in some kind of useful occupation.....	57.84	50.1	47.79	81.14	88	51.9	.....
Estimated value of farm and garden products during year.....	\$16,144 41	\$1,807 76	\$7,495 74	\$4,152 72	\$9,755 45	\$9,635 00	\$197,384 22
Estimated value of articles made or manufac- tured by patients during the year.....	45,384 70	3,017 16	33,073 32	32,327 96	18,438 61	406 71	259,455 57

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year—All hospitals

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION		
	Men	Women	Total	Men	Women	Total
Moral:						
Adverse conditions (such as loss of friends, business troubles, etc.)	151	216	367	50	51	101
Mental strain, worry and overwork (not included in above)	159	178	337	48	48	96
Religious excitement	14	24	38	5	10	15
Love affairs (including seduction)	14	44	58	1	6	7
Fright and nervous shock	33	37	70	9	4	13
Physical:						
Intemperance	464	77	541	92	22	114
Sexual excess	16	1	17	2	1	3
Veneral diseases	112	15	127	16	1	17
Masturbation	98	10	108	24	1	25
Sunstroke	46	18	64	13	3	16
Accident or injury	90	17	107	19	2	21
Pregnancy		12	12		2	2
Parturition and puerperium		95	95		21	21
Lactation		11	11			
Change of life		106	106		30	30
Fevers	11	13	24	1	1	2
Privation and overwork	37	54	91	9	9	18
Epilepsy	96	61	157	23	18	41

Table No. 3—(Concluded)
Showing the assigned causes of insanity in cases admitted during the current year—All hospitals

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION		
	Men	Women	Total	Men	Women	Total
Physical—(Continued)						
Other convulsive disorders.....	1	3	4	.....	2	2
Diseases of skull and brain.....	41	18	59	10	5	15
Old age.....	116	123	239	16	19	35
Exophthalmic goitre.....	.....	3	3	.....	.....	.....
Epidemic influenza.....	35	23	58	13	8	21
Abuse of drugs.....	18	21	39	4	4	8
Loss of special sense.....	3	.....	3	1	.....	1
Uraemic poisoning.....	6	.....	6	1	.....	1
Other auto-infection.....	1	.....	1	.....	.....	.....
All other bodily disorders and ill health.....	129	168	297	36	43	79
Heredity.....	192	199	391	152	198	350
Congenital defect.....	35	44	79	3	8	11
Unascertained.....	597	763	1,360	123	93	216
Not insane	31	16	47	.....	.....	.....
Total	2,546	2,370	4,916	671	610	1,281

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888—All hospitals

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious.....	14	3	8	164	27	110
Mania, acute.....	697	397	71	10,513	4,506	1,364
Mania, recurrent.....	96	32	6	1,100	468	100
Mania, chronic.....	345	27	107	4,607	235	1,356
Melancholia, acute.....	1,326	672	155	16,726	5,782	2,168
Melancholia, simple.....	26	14	1	573	206	24
Melancholia, chronic.....	489	39	167	4,873	328	1,590
Alternating (circular) insanity.....	12	1	4	150	10	10
Paranoia.....	160	.....	13	834	24	56
General paralysis.....	424	.....	311	4,552	1	3,424
Dementia, primary.....	35	3	8	1,330	217	496
Dementia, terminal.....	982	1	899	14,152	108	8,632
Epilepsy with insanity.....	143	6	102	2,216	48	989
Imbecility with maniacal attacks.....	112	14	14	1,209	24	161
Idiocy.....	6	.....	1	151	.....	34
Not insane*.....	49	.....	1	522	.....	14
Unascertained.....	.....	.....	.....	937	.....	.....
Total.....	4,916	1,209	1,868	64,609	11,984	20,528

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888—All hospitals

DURATION PREVIOUS TO ADMISSION	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Under one month	179	217	396
One to three months.....	169	157	326
Three to six months.....	60	84	144
Six to nine months.....	29	46	75
Nine months to one year.....	13	18	31
One year to eighteen months.....	24	32	56
Eighteen months to two years.....	2	6	8
Two to three years.....	13	20	33
Three to four years	8	5	13
Four to five years.....	4	2	6
Five to ten years	5	10	15
Ten to twenty years.....	.....	3	3
Unascertained.....	43	60	103
Total.....	549	660	1,209

PERIOD UNDER TREATMENT			
Under one month	13	12	25
One to three months.....	111	120	231
Three to six months.....	179	191	370
Six to nine months.....	90	131	221
Nine months to one year.....	44	72	116
One year to eighteen months	62	65	127
Eighteen months to two years	14	19	33
Two to three years.....	20	22	42
Three to four years.....	9	13	22
Four to five years.....	1	6	7
Five to ten years.....	6	4	10
Ten to twenty years.....	.....	5	5
Total.....	549	660	1,209

Table No. 6—(Concluded)

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888—All hospitals

DURATION PREVIOUS TO ADMISSION	SINCE OCTOBER 1, 1888		
	Men	Women	Total
Under one month	1,959	2,005	3,964
One to three months	1,370	1,450	2,820
Three to six months	622	732	1,354
Six to nine months	343	381	724
Nine months to one year	125	135	260
One year to eighteen months	224	236	460
Eighteen months to two years	72	62	134
Two to three years	140	152	292
Three to four years	75	64	139
Four to five years	38	38	76
Five to ten years	71	75	146
Ten to twenty years	26	42	68
Unascertained	862	685	1,547
Total	5,927	6,057	11,984
PERIOD UNDER TREATMENT			
Under one month	165	106	271
One to three months	1,258	1,003	2,261
Three to six months	1,818	1,860	3,678
Six to nine months	1,021	1,191	2,212
Nine months to one year	554	665	1,219
One year to eighteen months	565	622	1,187
Eighteen months to two years	173	197	370
Two to three years	178	214	392
Three to four years	91	91	182
Four to five years	43	38	81
Five to ten years	53	53	106
Ten to twenty years	7	17	24
Thirty to forty years	1	.....	1
Total	5,927	6,057	11,984

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888—All hospitals

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific Infectious Diseases:						
Typhoid fever.....	7	3	10	62	45	107
Scarlet fever.....	.....	.....	.....	1	.....	1
Measles.....	2	.....	2	2	1	3
Mumps.....	.....	.....	.....	1	6	7
Smallpox.....	.....	.....	.....	2	2	4
Influenza.....	3	5	8	25	78	103
Cerebro-spinal meningitis.....	.....	.....	.....	1	2	3
Diphtheria.....	.....	.....	.....	2	1	3
Erysipelas.....	13	4	17	61	69	130
Septicemia and pyemia.....	1	4	5	78	38	116
Dysentery.....	24	27	51	93	127	220
Malarial affections.....	.....	1	1	1	3	4
Syphilis.....	3	3	6	8	14	22
Tuberculosis.....	113	154	267	910	2,219	3,129
Anthrax.....	.....	.....	.....	2	.....	2
Constitutional Diseases:						
Rheumatism (or rheumatic affections).....	1	1	2	2	6	8
Arthritis deformans.....	.....	1	1	.....	2	2
Gout.....	.....	.....	.....	.....	1	1

Diabetes mellitus and diabetes insipidus.....	1	.....	1	8	10	18
Scurvy, purpura and hæmophilia.....	.....	.....	.....	3	12	15
Diseases of the Digestive System:						
Mouth, salivary glands, pharynx, tonsils and œsophagus	1	1	2	10	7	17
Diseases of the stomach.....	3	6	9	556	657	1,213
Diseases of the intestines.....	59	56	115			
Diseases of the liver.....	11	6	17	61	47	108
Diseases of the pancreas.....	.....	.....	.....	2	.....	2
Diseases of the peritoneum.....	2	5	7	57	52	109
Diseases of the Respiratory System:						
Diseases of the nose and larynx.....	.....	.....	.....	4	3	7
Diseases of the bronchi.....	10	2	12	86	84	170
Diseases of the lungs.....	101	105	206	1,424	898	2,322
Diseases of the pleura.....	3	1	4			
Diseases of the Circulatory System:						
Diseases of the pericardium.....	.....	13	13	13	44	57
Diseases of the heart.....	115	76	191	969	981	1,950
Arterio-sclerosis.....	39	10	49			
Aneurism.....	1	1	2	15	16	31
Diseases of the Blood and Ductless Glands:						
Anæmia, pernicious anæmia and leukæmia.....	1	3	4	7	13	20
Hodgkin's disease, Addison's disease and myxœdema..	.....	1	1	2	3	5
Exophthalmic goitre.....	.....	1	1	.....	6	6
Diseases of the genito-urinary system.....	77	43	120	587	526	1,113
Nephritis.....	1	4	5	1	4	5

Table No. 7—(Concluded)

Showing the causes of death of patients who died during the current year and since October 1, 1888—All hospitals

CAUSE OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the Nervous System :						
Diseases of the nerves.....	.....	2	2	1	15	16
Diseases of the spinal cord.....	7	1	8	39	23	62
Diseases of the meninges.....	9	5	14	136	64	200
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions)	55	54	109	693	739	1,432
Functional nervous diseases (paralysis agitans, chorea, eclampsia, hysteria, neurasthenia)	1		2	4	57	61
Epilepsy	33	16	49	425	240	665
Mental Diseases :						
Exhaustion of acute mental disease.....	54	75	129	1,043	1,123	2,166
General paralysis of the insane.....	190	51	241	2,611	454	3,065
The Intoxications; Heat-stroke; Obesity :						
Alcoholism .....	.....	.....	.....	7	2	9
Opium habit.....	.....	.....	.....	1	1	2
Heat-stroke	5	2	7	11	4	15
Obesity .....	.....	.....	.....	.....	1	1
Debility of old age	43	84	127	492	707	1,199

Accident	3	1	4	49	26	75
Suicide	5	5	10	71	31	102
Surgical and gynecological diseases and diseases of the skin.	1	8	9	}	}	}
Malignant new growths or cancer	12	16	28			
Unascertained .....	.....	.....	.....	.....	1	1
Total	1,010	858	1,868	10,782	9,746	20,528

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888—
All hospitals

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	214	156	370	2,055	1,858	3,913
Maternal branch.....	203	194	397	2,101	2,469	4,570
Paternal and maternal branches.....	34	43	77	366	417	783
Collateral branches.....	190	196	386	2,267	2,757	5,024
No hereditary tendency.....	1,451	1,467	2,918	14,684	14,406	29,090
Uncertained.....	451	314	765	11,198	9,940	21,128
Not insane.....	3	.....	3	84	17	101
Total.....	2,546	2,370	4,916	32,745	31,864	64,609

TABLE No. 9
Showing civil condition of patients admitted during the current year and since October 1, 1888—All hospitals

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	1,222	919	2,141	15,964	11,673	27,637
Married	1,079	1,017	2,096	13,221	13,435	26,656
Widowed	196	409	605	2,715	5,702	8,417
Divorced	25	16	41	134	155	289
Unascertained	24	9	33	711	899	1,610
Total	2,546	2,370	4,916	32,745	31,864	64,609

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888—All hospitals

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	75	16	91	738	138	876
Academic	87	102	189	1,163	1,286	2,449
Common school	1,621	1,472	3,093	17,359	14,417	31,776
Read and write	395	349	744	6,201	6,656	12,857
Read only	52	63	115	1,146	1,641	2,787
No education	132	221	353	2,185	3,147	5,332
Unascertained	184	147	331	3,953	4,579	8,532
Total ..	2,546	2,370	4,916	32,745	31,864	64,609

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888—All hospitals

DURATION PREVIOUS TO ADMISSION	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Under one month.....	82	85	167
One to three months.....	128	92	220
Three to six months.....	81	58	139
Six to nine months.....	91	51	142
Nine months to one year.....	26	13	39
One year to eighteen months.....	105	54	159
Eighteen months to two years.....	25	14	39
Two to three years.....	72	58	130
Three to four years.....	53	41	94
Four to six years.....	64	56	120
Six to ten years.....	47	54	101
Ten to twenty years.....	49	63	112
Twenty years and over.....	37	36	73
Not insane*.....	1	.....	1
Unascertained.....	149	183	332
Total.....	1,010	858	1,868
PERIOD UNDER TREATMENT			
Under one month.....	128	94	222
One to three months.....	127	100	227
Three to six months.....	93	72	165
Six to nine months.....	68	44	112
Nine months to one year.....	55	43	98
One year to eighteen months.....	74	81	155
Eighteen months to two years.....	47	33	80
Two to three years.....	96	71	167
Three to four years.....	58	58	116
Four to six years.....	78	68	146
Six to ten years.....	88	98	186
Ten to twenty years.....	67	70	137
Twenty years and over.....	31	26	57
Total.....	1,010	858	1,868

* Includes cases of alcoholism, drug habit, etc.

Table No. 11—(Concluded)

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888—All hospitals

DURATION PREVIOUS TO ADMISSION	SINCE OCTOBER 1, 1888		
	Men	Women	Total
Under one month.....	1,104	1,049	2,153
One to three months.....	1,242	929	2,171
Three to six months.....	778	555	1,333
Six to nine months.....	669	451	1,120
Nine months to one year.....	298	237	535
One year to eighteen months.....	819	496	1,315
Eighteen months to two years.....	262	184	446
Two to three years.....	753	585	1,338
Three to four years.....	445	363	808
Four to six years.....	457	416	873
Six to ten years.....	421	439	860
Ten to twenty years.....	470	492	963
Twenty years and over.....	290	351	641
Not insane*.....	7	5	12
Unascertained.....	2,767	3,193	5,960
Total.....	10,782	9,746	20,528
PERIOD UNDER TREATMENT			
Under one month.....	1,547	1,200	2,747
One month to three months.....	1,359	993	2,352
Three to six months.....	1,146	838	1,984
Six to nine months.....	700	568	1,268
Nine months to one year.....	600	503	1,103
One year to eighteen months.....	957	801	1,758
Eighteen months to two years.....	585	433	1,018
Two to three years.....	965	784	1,749
Three to four years.....	607	664	1,271
Four to six years.....	686	761	1,447
Six to ten years.....	770	893	1,663
Ten to twenty years.....	635	907	1,542
Twenty years and over.....	225	401	626
Total.....	10,782	9,746	20,528

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 12
Showing ages of those admitted during the current year and since October 1, 1888—All hospital

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From five to ten years .....	.....	.....	.....	3	4	7
From ten to fifteen years	6	4	10	100	87	187
From fifteen to twenty years	117	87	204	1,375	1,243	2,618
From twenty to twenty-five years	243	256	499	3,179	2,998	6,177
From twenty-five to thirty years	303	308	611	3,842	3,816	7,658
From thirty to thirty-five years	334	288	622	4,083	3,816	7,899
From thirty-five to forty years	326	281	607	4,473	3,758	8,231
From forty to fifty years	533	482	1,015	6,475	6,273	12,748
From fifty to sixty years	336	318	654	4,317	4,326	8,643
From sixty to seventy years	215	192	407	2,734	2,817	5,551
From seventy to eighty years	104	130	234	1,413	1,594	3,007
From eighty to ninety years	28	23	48	403	420	823
Ninety and over .....	.....	1	1	24	26	50
Unascertained	1	.....	1	324	686	1,010
Total	2,546	2,370	4,916	32,745	31,864	64,609

TABLE No. 13
Showing ages of those discharged recovered during the current year and since October 1, 1888—All hospitals

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From five to ten years .....	.....	.....	.....	.....	1	1
From ten to twenty years	39	37	76	380	460	840
From twenty to thirty years	160	228	388	1,652	2,024	3,676
From thirty to forty years	138	184	322	1,600	1,676	3,276
From forty to fifty years	108	119	227	1,263	1,084	2,347
From fifty to sixty years	65	73	138	646	555	1,201
From sixty to seventy years	32	15	47	299	205	504
From seventy to eighty years	7	4	11	71	44	115
Over eighty years .....	.....	.....	.....	3	.....	3
Unascertained .....	.....	.....	.....	13	8	21
Total	549	660	1,209	5,927	6,057	11,984

TABLE No. 14

Showing ages of patients who died during the current year and since October 1, 1888—All hospitals

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From ten to fifteen years.....	.....	.....	.....	6	13	19
From fifteen to twenty years.....	11	10	21	113	136	249
From twenty to twenty-five years.....	30	16	46	373	394	767
From twenty-five to thirty years.....	60	44	104	605	591	1,196
From thirty to thirty-five years.....	78	70	148	943	747	1,690
From thirty-five to forty years.....	107	72	179	1,330	836	2,166
From forty to fifty years.....	227	154	381	2,297	1,779	4,076
From fifty to sixty years.....	182	146	328	1,936	1,744	3,680
From sixty to seventy years.....	160	161	321	1,619	1,686	3,305
From seventy to eighty years.....	108	142	250	1,129	1,310	2,439
From eighty to ninety years.....	44	36	80	388	457	845
From ninety years and over.....	1	6	7	15	38	53
Unascertained.....	2	1	3	28	15	43
Total.....	1,010	858	1,868	10,782	9,746	20,528

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901—All hospitals

DURATION OF INSANITY	Men	Women	Total
Under one month.....	480	441	921
One to three months.....	389	393	782
Three to six months.....	278	207	485
Six to nine months.....	153	164	317
Nine months to one year.....	125	49	174
One year to eighteen months.....	142	154	296
Eighteen months to two years.....	97	36	133
Two to three years.....	126	147	273
Three to four years.....	78	87	165
Four to five years.....	69	62	131
Five to ten years.....	128	165	293
Ten to fifteen years.....	58	83	141
Fifteen to twenty years.....	37	29	66
Twenty to thirty years.....	23	30	53
Thirty years and upwards.....	9	13	22
Not insane*.....	27	12	39
Unascertained.....	327	298	625
Total.....	2,546	2,370	4,916

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901—All hospitals

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.....	176	195	371
One to three months.....	365	392	757
Three to six months.....	465	392	857
Six to nine months.....	441	422	863
Nine months to one year.....	313	348	661
One year to eighteen months.....	756	650	1,406
Eighteen months to two years.....	487	514	1,001
Two to three years.....	1,097	1,787	2,884
Three to four years.....	929	992	1,921
Four to five years.....	592	687	1,279
Five to ten years.....	2,776	3,135	5,911
Ten to fifteen years.....	1,211	1,186	2,397
Fifteen to twenty years.....	624	592	1,216
Twenty to thirty years.....	480	476	956
Thirty years and upwards.....	43	131	174
Total.....	10,755	11,899	22,654

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888—All Hospitals

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, &c.....	98	2	100	1,128	87	1,215
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc....	387	9	396	4,671	42	4,713
Agricultural and Pastoral:						
Farmers, gardeners, herdsmen, etc.....	300	.....	300	4,039	8	4,047
Mechanics, at out door vocations:						
Blacksmiths, carpenters, engine fitters, sawyers, painters, police, etc.....	440	.....	440	5,739	.....	5,739
Mechanics, etc., at sedentary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	388	.....	388	4,711	17	4,728

Domestic service:									
Waiters, cooks, servants, etc.....	95	754	849	1,141	11,759	12,900			
Educational and higher domestic duties:									
Governesses, teachers, students, housekeepers, nurses, etc.....	16	1,095	1,111	293	13,281	13,574			
Commercial:									
Shopkeepers, saleswomen, stenographers, typewriters, etc.....	10	25	35	68	388	456			
Employed in sedentary occupation:									
Tailoresses, seamstresses, bookbinders, factory workers, etc.....	18	224	242	119	2,349	2,468			
Miners, seamen, etc.....	27	.....	27	241	.....	241			
Prostitutes.....	.....	3	3	.....	47	47			
Laborers.....	585	.....	585	7,854	.....	7,854			
No occupation.....	153	253	406	1,862	2,742	4,604			
Unascertained.....	29	5	34	879	1,144	2,023			
Total.....	2,546	2,370	4,916	32,745	31,864	64,609			

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888—All hospitals

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Total admissions.....	2,546	2,370	4,916	32,745	31,864	64,609
Total born in United States.....	1,514	1,313	2,827	18,048	15,308	33,356
Africa.....	1	.....	1	8	2	10
Algeria.....	.....	.....	.....	3	.....	3
Arabia.....	.....	.....	.....	3	.....	3
Armenia.....	1	.....	1	6	1	7
Austria.....	48	34	82	322	309	631
Australia.....	.....	1	1	6	4	10
Azores (Portugal).....	.....	.....	.....	.....	2	2
Bahama Islands.....	.....	.....	.....	1	.....	1
Barbadoes.....	.....	.....	.....	2	.....	2
Bavaria.....	1	1	2	20	9	29
Belgium.....	.....	.....	.....	19	7	26
Bohemia.....	5	11	16	68	109	177
Born at sea.....	.....	.....	.....	2	1	3
Brazil.....	.....	.....	.....	1	1	2
Bulgaria.....	.....	.....	.....	1	.....	1
Burnah.....	.....	.....	.....	.....	1	1

Canada	60	47	107	627	645	1,272
Canaries .....	.....	.....	.....	2	.....	2
China	6	.....	6	51	.....	51
Corsica .....	.....	.....	.....	1	.....	1
Cuba .....	.....	3	3	12	18	30
Denmark	9	8	17	72	54	126
East Indies .....	.....	.....	.....	1	.....	1
Ecuador .....	.....	.....	.....	1	.....	1
Egypt	1	.....	1	2	.....	2
England	59	67	126	1,043	923	1,966
Finland	1	2	3	28	23	51
France	11	5	16	266	188	454
Galicia .....	.....	.....	.....	.....	1	1
Germany	248	244	492	3,830	3,563	7,393
Greece	5	.....	5	17	1	18
Holland	5	6	11	61	52	113
Hungary	18	16	34	182	221	403
Iceland .....	.....	.....	.....	1	1	2
Indian (American) .....	.....	.....	.....	5	6	10
Ireland	271	405	676	4,426	7,020	11,446
Isle of Man .....	.....	.....	.....	.....	1	1
Italy	57	38	95	600	325	925
India .....	.....	.....	.....	5	2	7
Jamaica .....	.....	.....	.....	.....	1	1
Japan .....	.....	.....	.....	8	1	9
Macedonia .....	.....	.....	.....	.....	1	1
Madeira .....	.....	.....	.....	.....	1	1
Malta .....	.....	.....	.....	6	1	7
Mexico .....	.....	.....	.....	5	1	6

Table No. 18—(Concluded)

Showing the nativity of patients admitted during the current year and since October 1, 1888—All hospitals

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Norway	8	8	16	108	67	175
New Brunswick	1	.....	1	3	4	7
Newfoundland	1	.....	1	1	2	3
Nova Scotia .....	.....	1	1	7	7	14
Other British possessions	3	.....	3	26	4	30
South America .....	.....	.....	.....	8	1	9
Philippines .....	.....	.....	.....	1	.....	1
Poland	13	13	26	137	145	282
Prussia .....	.....	1	1	5	7	12
Roumania	4	1	5	26	27	53
Russia	81	81	162	758	775	1,533
Sandwich Islands	1	.....	1	1	.....	1
Saxony .....	.....	.....	.....	1	3	4
Scotland	19	15	34	264	242	506
Sicily .....	.....	.....	.....	1	.....	1
Spain	1	.....	1	22	4	26
Sweden	38	22	60	331	331	662
Switzerland	14	12	26	174	143	317
Syria .....	.....	2	2	.....	2	2

TABLE No. 19

Showing the residence by counties and classification of patients admitted to the State hospitals during the year ending September 30, 1901

COUNTIES	UTICA STATE HOSPITAL			WILLARD STATE HOSPITAL			HUDSON RIVER STATE HOSPITAL			MIDDLETOWN STATE HOMEOPATHIC HOSPITAL			BUFFALO STATE HOSPITAL		
	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total
Albany	1		1				116	1	117	2		2	1		1
Allegany				24		24									
Broome													3		3
Cattaraugus				30		30								1	1
Cayuga															
Chautauqua															
Chemung															
Chenango															
Clinton							15		15						
Columbia				1	1	2				2		2			
Cortland	1		1												
Delaware															
Dutchess	1		1	2		2	83	4	87	1		1	339	6	345
Erie															
Essex															
Franklin															
Fulton	31		31	13		12							3		3
Genesee							18		18	1		1			
Hamilton	1	1	2												
Herkimer	47	2	49												
Jefferson							2		2	6		6			
Kings															
Lewis															
Livingston															
Madison		1	1										2		2
Monroe				2		2									
Montgomery	37		37										1		1
Nassau															
New York							8	1	9	22	6	28	1		1
Niagara													36	1	37
Oneida	99		99												
Onondaga	1		1	2		2				1		1			
Ontario				35		35				1		1			

[illegible]

Table No. 19—(Continued)
Showing the residence by counties and classification of patients admitted to the State hospitals during the year ending September 30, 1901

COUNTIES	BINGHAMTON STATE HOSPITAL			ST. LAWRENCE STATE HOSPITAL			ROCHESTER STATE HOSPITAL			LONG ISLAND STATE HOSPITAL, KINGS PARK			LONG ISLAND STATE HOSPITAL, FLATBUSH		
	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total
Albany.....				6		6									
Allegany.....															
Broome.....	44		44	1		1									
Cattaraugus.....															
Cayuga.....	1		1				2		2						
Chautauqua.....															
Chemung.....	45	2	47												
Chenango.....	15		15	1		1									
Clinton.....				25		25									
Columbia.....															
Cortland.....	9		9	3		3									
Delaware.....	22	1	23												
Dutchess.....															
Erie.....				4		4	2		2						
Essex.....															
Fulton.....				21		21									
Genesee.....	1		1				2		2						
Greene.....															
Hamilton.....				1		1									
Herkimer.....	3		3	3		3	1		1						
Jefferson.....				39		39				449		448	216		216
Kings.....															
Leviss.....				11		11	18		18						
Livingston.....				3		3									
Madison.....	16	1	17				180		180						
Monroe.....				1		1									
Montgomery.....															
Nassau.....										11		11	4		4
New York.....				8		8	4		4	2		2	1		1
Niagara.....							1		1						
Oneida.....				5		5									
Onondaga.....				86		86									
Ontario.....							2		2						

County	221	5	226	323	3	326	217	217	481	244	244
Orange											
Orleans											
Oswego											
Potsdam											
Pulman											
Queens											
Richmond											
Rockland											
St. Lawrence											
Saratoga											
Schenectady											
Schoharie											
Schuyler											
Seneca											
Steuben											
Suffolk											
Sullivan											
Tioga											
Tompkins											
Ulster											
Warren											
Washington											
Wayne											
Westchester											
Wyoming											
Yates											
Soldiers' Home											
Unascertained											
Total	221	5	226	323	3	326	217	217	481	244	244

Orange	733	733	733	796	796	106	106	1	107	4,852	61	4,916
Orleans												
Oswego												
Putnam												
Queens												
Rensselaer												
Rochester	5	5	9	1	1							
Rochmond												
St. Lawrence												
Saratoga												
Schenectady												
Schoharie												
Schoyler												
Seneca												
Steuben												
Suffolk												
Sullivan												
Tioga												
Tompkins												
Ulster												
Warren												
Washington												
Wayne												
Westchester	1	1	1	1	1							
Wyoming												
Yates												
Soldiers' Home	2	2										
Unascertained												
Total	733	733	796	796	796	106	106	1	107	4,852	61	4,916

[illegible]

[illegible]

[illegible]

Table No. 20—(Concluded)
Showing the residence by counties and classification of patients remaining under treatment in the State hospitals
September 30, 1901

COUNTIES	MANHATTAN CENTRAL ISLIP						GOWANDA			ALL HOSPITALS					
	PUBLIC			PRIVATE			PUBLIC			PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Albany...							307	844	651	3	345	96	3	8	6
Allegany.....							51	45	96					1	1
Broome.....							113	100	213					1	1
Cattaraugus...				52	59	111		57	65					1	1
Cayuga.....							106	85	191					2	2
Chemung.....							88	105	193					4	6
Chenango.....				85	97	182		94	87					1	3
Columbia.....				1		1		41	41					1	1
Clinton.....							46	50	96					1	2
Cortland.....							49	66	115					2	4
Delaware.....							34	37	71					1	2
Dutchess.....							39	70	109					1	3
Essex.....				8	8	16	133	169	352					3	10
Franklin.....							606	627	1,233					7	12
Fulton.....							21	19	40					5	10
Genesee.....							45	38	83					1	2
Greene.....							31	49	80					1	2
Hamilton.....							43	47	90					1	2
Herkimer.....							4	42	46					1	1
Jefferson.....							5	1	6					1	1
Kings.....							40	78	118					2	3
Lewis.....							84	86	170					3	3
Livingston.....							1,406	1,724	3,130					12	24
Madison.....							38	40	78					1	1
Monroe.....				2	2	4		60	55					4	5
Montgomery.....							301	353	654					7	9
New York.....	270	121	391				17	10	27					1	1
Niagara.....				1	1	2	3,074	3,991	7,065					41	93
Oneida.....							89	98	187					52	104
Onondaga.....							218	224	442					6	11
Ontonario.....				5	5	10	197	226	423					2	7
Orange.....							97	94	191					191	191
Orleans.....				1	7	8	169	177	346					15	32
							29	34	63					17	32

LICENSED PRIVATE ASYLUM SYSTEM
General statistics for year ending September 30, 1901

INSTITUTIONS	REMAINING OCTOBER 1, 1900			ON ORIGINAL COMMITMENTS						TOTAL NUMBER UNDER TREATMENT DURING YEAR			Daily average population	Capacity of institution
	Men	Women	Total	FROM RESIDENCES			BY TRANSFERS FROM OTHER INSTITUTIONS FOR THE INSANE			Men	Women	Total		
				Men	Women	Total	Men	Women	Total					
Bloomingtondale.....	156	182	338	36	26	62	4	2	6	196	210	406	326	400
Providence Retreat.....	31	81	112	15	37	52	.....	.....	.....	46	118	164	115	125
Marshall Sanitarium.....	23	26	49	18	22	40	.....	2	2	40	50	91	51	90
Long Island Home.....	37	42	79	24	16	40	4	4	8	65	62	127	80	114
Brigham Hall Hospital.....	28	28	56	27	19	46	1	1	2	22	22	44	34	44
Sanford Hall.....	16	34	50	6	4	10	2	.....	.....	24	22	46	34	44
St. Vincent's Retreat.....	.....	62	62	.....	15	15	.....	3	3	.....	80	80	62	60
Breezehurst Terrace.....	10	12	22	3	5	8	2	2	4	15	13	28	22	30
Waldenere.....	4	2	6	1	1	2	.....	.....	.....	5	3	8	6	20
Dr. Wells' Sanitarium.....	.....	14	14	.....	4	4	.....	.....	.....	.....	18	18	14	16
Greenmont-on-the-Hudson.....	1	3	4	.....	.....	.....	.....	.....	.....	1	3	4	.....	12
Dr. MacDonald's House.....	.....	7	7	.....	.....	.....	.....	.....	.....	.....	7	7	7	10
The Pines.....	2	5	7	2	3	5	.....	.....	.....	4	8	12	9	12
Vernon House.....	2	2	4	1	2	3	.....	1	1	3	5	8	5	16
Interplines.....	1	4	5	8	1	9	.....	.....	.....	9	5	14	8	56
Glenmary.....	5	12	17	8	4	12	1	3	4	14	19	33	19	50
Falkirk.....	4	7	11	6	3	9	1	1	2	11	10	21	12	34
River Crest.....	32	35	67	75	49	124	6	8	14	113	92	205	70	75
Dr. Combes' Sanitarium.....	17	17	34	16	15	33	2	1	3	37	33	70	32	46
Dr. Kellogg's House.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	1	.....	8
Dr. Bond's House.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Knickerbocker Hall.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	369	559	928	248	228	476	23	27	50	640	814	1,454	930	1,297

Licensed Private Asylum System—(Concluded)

INSTITUTIONS	DISCHARGED DURING YEAR										WHOLE NUMBER DISCHARGED DURING THE YEAR	REMAINING OCTOBER 1, 1901				
	AS RECOVERED			AS IMPROVED			AS UNIMPROVED			DIED						
	Men		Women	Total	Men		Women	Total	Men				Women	Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men			Women	Total		
Bloomingsdale	9	9	18	17	11	28	7	5	12	19	7	26	52	144	178	322
Providence Retreat	11	13	24	1	7	8	3	5	8	2	2	4	17	29	38	55
Marshall Sanitarium	4	10	14	6	6	12	.....	3	3	7	5	12	31	24	55	79
Long Island Home	9	1	10	10	11	21	5	8	13	7	1	8	31	30	61	91
Brigham Hall Hospital	5	8	13	11	9	20	4	8	12	3	2	5	23	22	45	67
Sanford Hall	2	1	3	4	7	11	.....	.....	.....	1	1	2	7	17	24	41
St. Vincent's Retreat	5	5	10	2	4	6	.....	4	4	.....	.....	.....	.....	.....	.....	.....
Breezehurst Terrace	4	4	8	.....	1	3	.....	3	3	1	1	2	3	12	10	22
Walden	1	1	2	.....	3	3	.....	1	1	.....	.....	.....	.....	.....	.....	.....
Dr. Wells' Sanitarium	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greenmont-on-the-Hudson	1	1	2	1	2	3	1	.....	1	1	.....	.....	.....	.....	.....	.....
Dr. MacDonald's House	1	1	2	1	1	2	1	.....	1	1	.....	.....	.....	.....	.....	.....
The Pines	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vernon House	2	.....	2	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Interphes	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glenmary	4	3	7	.....	.....	.....	5	1	6	.....	.....	.....	1	3	4	5
Falkirk	2	1	3	.....	.....	.....	.....	2	2	1	.....	.....	.....	.....	.....	.....
Dr. Kellogg's House	9	10	19	45	41	86	8	11	19	14	5	19	76	67	143	219
Dr. Bond's House	7	10	17	2	6	8	2	1	3	8	2	10	19	19	38	57
Knickerbocker Hall .....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dr. Combes' Sanitarium .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dr. Kellogg's House .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dr. Bond's House .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Knickerbocker Hall .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	66	77	143	101	108	209	35	45	80	64	34	98	266	530	549	943

MATTEAWAN STATE HOSPITAL

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900.....	698	54	752
Admitted during year ending September 30, 1901, on original commitments....	41	5	46
By transfers from other institutions for insane	11	2	13
Total number under treatment during year	750	61	811
Daily average population .....	....	....	640.427
Capacity of institution	470	80	550
Discharged during the year:			
As recovered	19	....	19
As improved	77	3	80
As unimproved	88	1	89
Died	18	....	18
Whole number discharged during the year	202	4	206
Remaining October 1, 1901.....	548	57	605

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening at Auburn, N.Y., February 2, 1859; at Matteawan April 25, 1892.

Total acreage of grounds and buildings	245 acres
Value of real estate, including buildings.....	\$879,000 00
Value of personal property.....	59,114 10
Acreage under cultivation	195 acres

Receipts during year, maintenance fund:

Balance on hand October 1, 1900.....	\$3,267 02
From State Treasury for maintenance on estimates 1 to 12 inclusive..	130,979 24
From county patients.....	55,665 94
From all other sources	1,318 51

Total receipts for maintenance..... \$191,230 71

Total receipts from special appropriations including balance on hand from last year.... \$9,972 83

Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries.....	10,723 84
Estimate No. 2. For wages.....	44,629 45
Estimate No. 3. For provisions and stores.....	41,218 67
Estimate No. 4. For ordinary repairs	3,013 85
Estimate No. 5. For farm and grounds.....	2,177 31
Estimate No. 6. For clothing and bedding.....	6,507 01
Estimate No. 7. For furniture.....	1,329 09
Estimate No. 8. For books and stationery	1,150 21
Estimate No. 9. For fuel and light.....	12,632 57
Estimate No. 10. For medical supplies.....	1,159 29
Estimate No. 11. For miscellaneous expenses ...	5,933 71
Estimate No. 12. For transportation.....	245 01

Total disbursements, estimates 1 to 12 inclusive. \$130,720 01

Table No. 2—(Concluded)

Remitted to Comptroller pursuant to Chap. 580, Laws of 1899	\$57,639 00
Total disbursements during year for extra- ordinary improvements.....	6,379 78
Remitted to State Treasurer, sundry receipts, Chap. 580, Laws of 1899	57,639 00
General maintenance fund	2,871 70
Special appropriations.....	3,593 05
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive.....	\$3.9157
Maximum rate of wages paid attendants:	
Men	\$35 per month
Women.....	25 per month
Minimum rate of wages paid attendants:	
Men	18 per month
Women.....	15 per month
Proportion of day attendants to average daily popu- lation.....	1 to 7.47 pts
Proportion of night attendants to average daily population.....	1 to 35.39 pts
Percentage of daily patient population engaged in some kind of useful occupation	39
Estimate value of farm and garden products during year.....	\$10,716 47

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDIS- POSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.).....	3	.....	3	.....	.....	.....	2
Mental strain, worry and overwork (not included in above) .....	.....	1	1	.....	.....	.....	1
Physical:							
Intemperance	5	2	7	1	.....	1	3
Venereal diseases	5	.....	5	4	.....	4	...
Accident or injury.....	2	.....	2	.....	.....	.....	1
Change of life.....	.....	1	1	.....	1	1	..
Epilepsy	6	.....	6	4	.....	4	2
Old age	1	.....	1	.....	.....	.....	1
Abuse of drugs.....	1	.....	1	.....	.....	.....	1
All other bodily disorders and ill health.....	1	.....	1	1	.....	1	.....
Heredity	2	1	3	2	1	3	.....
Congenital defect.....	2	1	3	1	..	1	2
Unascertained	24	1	25	7	.....	7	16
Total.....	52	7	59	20	2	22	29

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute.....	19	8	5	351	85	31
Mania, recurrent.....				10	6	2
Mania, chronic.....	12	1	3	138	22	41
Melancholia, acute.....	9	4	3	292	96	28
Melancholia, simple.....		6	1	299	112	20
Melancholia, chronic.....	5		1	52	2	19
Alternating (circular) insanity.....						1
General paralysis.....	3		1	48		42
Dementia, primary.....			1	101	7	9
Dementia, terminal.....	1			78		37
Epilepsy with insanity.....	7			55	3	9
Imbecility with mainiacal attacks.....	3		3	78	3	9
Idiocy.....				2		
Not insane*.....				20		

* Includes cases of alcoholism, drug habit, feigned insanity, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	4	.....	4	.....	.....	.....	108	1	109	.....	1	1
One to three months	8	.....	8	.....	.....	.....	55	.....	55	12	1	13
Three to six months	3	.....	3	.....	.....	.....	26	2	28	37	.....	37
Six to nine months	2	.....	2	2	.....	2	13	.....	13	57	1	58
Nine months to one year .....	.....	.....	.....	2	.....	2	3	1	4	45	3	48
One year to eighteen months	1	.....	1	1	.....	1	7	1	8	50	3	53
Eighteen months to two years .....	.....	.....	.....	5	.....	5	1	.....	1	48	1	49
Two to three years .....	.....	.....	.....	5	.....	5	4	1	5	39	.....	39
Three to four years .....	.....	.....	.....	2	.....	2	.....	.....	.....	19	1	20
Four to five years .....	.....	.....	.....	.....	.....	.....	3	1	4	7	2	9
Five to ten years .....	.....	.....	.....	2	.....	2	1	.....	1	9	.....	9
Unascertained	1	.....	1	.....	.....	.....	102	6	108	.....	.....	.....
Total	19	.....	19	19	.....	19	323	13	336	323	13	336

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases:						
Dysentery					1	2
Tuberculosis.....	10		10	90	2	92
Constitutional diseases:						
Diabetes mellitus and diabetes insipidus.				2		2
Diseases of the digestive system:						
Diseases of the stomach.....				4		4
Diseases of the intestines.....					1	1
Diseases of the liver.....	1		1	5		5
Diseases of the peritoneum....				5		5
Diseases of the respiratory system:						
Diseases of the lungs	2		2	16		16
Diseases of the pleura.....				1		1
Diseases of the circulatory system:						
Diseases of the heart	2		2	17		17
Arterio-sclerosis.....	1		1	1		1
Aneurism.....				1		1
Diseases of the blood and ductless glands:						
Diseases of the genito-urinary system.....				9	1	10
Diseases of the nervous system:						
Diseases of the meninges.....				2		2
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions)				10	2	12
Epilepsy				3	1	4
Mental diseases:						
Exhaustion of acute mental disease				1		1
Exhaustion of chronic mental disease.....				7	1	8
General paralysis of the insane.	2		2	42	2	44
Debility of old age				9		9
Suicide				9		9
Malignant new growths or cancer...				2		2
Total	18		18	237	11	248

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch	4	.....	4	59	7	66
Maternal branch	11	.....	11	90	8	98
Paternal and maternal branches . . . . .	.....	.....	.....	13	.....	13
Collateral branches . . .	5	2	7	72	4	76
No hereditary tendency	8	.....	8	176	13	189
Unascertained	24	5	29	1,017	65	1,082
Total	52	7	59	1,427	97	1,524

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	32	4	36	1,001	37	1,038
Married	15	1	16	360	42	402
Widowed	4	2	6	54	15	69
Divorced	1	.....	1	3	.....	3
Unascertained . . . . .	.....	.....	.....	9	3	12
Total	52	7	59	1,427	97	1,524

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	1	.....	1	13	4	17
Academic	1	1	2	24	4	28
Common school	16	2	18	388	27	415
Read and write	22	3	25	731	46	777
Read only	3	.....	3	76	4	80
No education	7	1	8	168	12	180
Unascertained	2	.....	2	27	.....	27
Total	52	7	59	1,427	97	1,524

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888		
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	1	.....	1	.....	.....	.....	33	1	34
One to three months	5	.....	5	.....	.....	.....	26	.....	26
Three to six months	1	.....	1	1	.....	1	16	1	17
Six to nine months	1	.....	1	.....	.....	.....	9	.....	9
Nine months to one year .....	.....	.....	.....	3	.....	3	4	.....	4
One year to eighteen months	1	.....	1	2	.....	2	9	.....	9
Eighteen months to two years .....	.....	.....	.....	2	.....	2	3	.....	3
Two to three years .....	.....	.....	.....	2	.....	2	7	1	8
Three to four years .....	.....	.....	.....	.....	.....	.....	3	.....	3
Four to six years .....	.....	.....	.....	1	.....	1	3	.....	3
Six to ten years .....	.....	.....	.....	5	.....	5	4	.....	4
Ten to twenty years .....	.....	.....	.....	1	.....	1	7	.....	7
Twenty years and over .....	.....	.....	.....	1	.....	1	8	.....	8
Unascertained	9	.....	9	.....	.....	.....	105	8	113
Total	18	.....	18	18	.....	18	237	11	248
Average duration of insane life (giving years and tenths) .....	.....5.1785+						.....	.....	.....
							.....	.....	.....8.37+

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCT. 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years..	.....	.....	.....	1	.....	1
From 15 to 20 years..	7	.....	7	109	7	116
From 20 to 25 years..	2	.....	2	240	18	258
From 25 to 30 years..	8	2	10	406	18	424
From 30 to 35 years..	14	1	15	170	18	188
From 35 to 40 years..	3	1	4	223	13	236
From 40 to 50 years..	15	3	18	188	14	202
From 50 to 60 years..	1	.....	1	63	6	69
From 60 to 70 years..	2	.....	2	23	3	26
From 70 to 80 years..	.....	.....	.....	3	.....	3
Unascertained .....	.....	.....	.....	1	.....	1
Total	52	7	59	1,427	97	1,524

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years..	.....	.....	.....	10	.....	10
From 20 to 30 years..	9	.....	9	182	5	187
From 30 to 40 years..	7	.....	7	95	5	100
From 40 to 50 years..	2	.....	2	23	2	25
From 50 to 60 years..	1	.....	1	10	1	11
From 60 to 70 years..	.....	.....	.....	2	.....	2
From 70 to 80 years..	.....	.....	.....	1	.....	1
Total	19	.....	19	323	13	336

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCT. 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years..	2	.....	2	4	.....	4
From 20 to 25 years..	1	.....	1	16	3	19
From 25 to 30 years..	2	.....	2	36	2	38
From 30 to 35 years..	1	.....	1	32	2	34
From 35 to 40 years..	5	.....	5	38	.....	38
From 40 to 50 years..	3	.....	3	47	3	50
From 50 to 60 years..	2	.....	2	24	.....	24
From 60 to 70 years..	2	.....	2	22	1	23
From 70 to 80 years..	..	.....	.....	14	.....	14
From 80 to 90 years..	.....	.....	.....	3	.....	3
Over ninety.....	.....	.....	.....	1	.....	1
Total	18	.....	18	237	11	248

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month	5	2	7
One to three months	5	.....	5
Three to six months	1	.....	1
Six to nine months	5	.....	5
One year to eighteen months	6	1	7
Two to three years	3	1	4
Three to four years	4	.....	4
Four to five years	2	1	3
Five to ten years	4	.....	4
Ten to fifteen years	2	.....	2
Fifteen to twenty years	1	.....	1
Twenty to thirty years	1	1	2
Unascertained	13	1	14
Total	52	7	59

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	2	.....	2
One to three months	5	1	6
Three to six months	10	2	12
Six to nine months	19	2	21
Nine months to one year	10	2	12
One year to eighteen months	56	4	60
Eighteen months to two years	31	7	38
Two to three years	47	5	52
Three to four years	46	4	50
Four to five years	50	3	53
Five to ten years	187	14	201
Ten to fifteen years	56	7	63
Fifteen to twenty years	13	2	15
Twenty to thirty years	14	4	18
Thirty years and upwards	2	.....	2
Total	548	57	605

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc	1	.....	1	26	.....	26
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.....	5	.....	5	106	.....	106
Agricultural and pastoral:						
Farmers, gardeners, herdsmen, etc.....	3	.....	3	84	.....	84
Mechanics, at out-door vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc.....	5	.....	5	260	1	261
Mechanics, etc., at sedentary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	14	.....	14	317	2	319
Domestic service:						
Waiters, cooks, servants, etc.....	2	7	9	69	62	131

Educational and higher domestic duties :						
Governesses, teachers, students, housekeepers, nurses, etc.....	.....	.....	.....	9	12	21
Commercial :						
Shopkeepers, saleswomen, stenographers, typewriters, etc.....	.....	.....	.....	10	2	12
Employed in sedentary occupation :						
Tailoresses, seamstresses, bookbinders, factory workers, etc. ....	.....	.....	.....	1	11	12
Miners, seamen, etc.....	3	.....	3	50	.....	50
Prostitutes.....	.....	.....	.....	.....	3	3
Laborers.....	16	.....	16	435	.....	435
No occupation.....	3	.....	3	48	3	51
Unascertained.....	.....	.....	.....	12	1	13
Total	52	7	59	1,427	97	1,524

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Algiers	1	.....	1	4	.....	4
Austria	1	.....	1	17	.....	17
Australia .....	.....	.....	.....	2	.....	2
British India .....	.....	.....	.....	1	.....	1
Bohemia	2	.....	2	3	.....	3
Canada	2	.....	2	31	1	32
China	1	.....	1	5	.....	5
Cuba .....	.....	.....	.....	2	.....	2
Denmark .....	.....	.....	.....	1	.....	1
England	2	.....	2	46	2	48
France .....	.....	.....	.....	6	1	7
Germany	5	.....	5	124	3	127
Greece .....	.....	.....	.....	3	.....	3
Holland .....	.....	.....	.....	5	.....	5
Hungary .....	.....	.....	.....	2	.....	2
Ireland	3	2	5	110	24	134
Italy	6	.....	6	96	2	98
Malta .....	.....	.....	.....	1	.....	1
Norway .....	.....	.....	.....	.....	1	1
Persia .....	.....	.....	.....	1	.....	1
Poland .....	.....	.....	.....	15	3	18
Russia	2	.....	2	28	2	30
Scotland .....	.....	.....	.....	6	2	8
Sicily .....	.....	.....	.....	1	.....	1
Sweden	1	.....	1	6	1	7
Switzerland .....	.....	.....	.....	5	.....	5
United States	26	5	31	866	53	919
West Indies .....	.....	.....	.....	6	1	7
Unascertained .....	.....	.....	.....	34	1	35
Total	52	7	59	1,427	97	1,524

Of the total number admitted since the 1st of October, 1888, the parents of 61.35 per cent were both of foreign birth.

In 3.41 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 3.48 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany	1	.....	1
Allegany	1	.....	1
Broome	1	.....	1
Cayuga	1	.....	1
Chenango	1	.....	1
Clinton	2	.....	2
Cortland	1	.....	1
Dutchess	1	.....	1
Kings	10	.....	10
Madison	1	.....	1
Monroe	1	.....	1
Montgomery	1	.....	1
New York	19	.....	19
Oneida	1	.....	1
Orange	1	.....	1
Oswego	1	.....	1
Rensselaer	1	.....	1
Richmond	2	.....	2
Rockland	1	.....	1
St Lawrence	1	.....	1
Steuben	2	.....	2
Suffolk	3	.....	3
Sullivan	1	.....	1
Wayne	2	.....	2
Westchester	1	.....	1
Yates	1	.....	1
Total	59	.....	59

TABLE No. 20

Showing the residence by counties and classification of patients remaining under treatment September 30, 1901

COUNTIES	PUBLIC		
	Men	Women	Total
Albany	20	5	25
Allegany	1	.....	1
Broome	3	.....	3
Cattaraugus	3	.....	3
Cayuga	4	.....	4
Chautauqua	2	.....	2
Chemung	2	3	5
Chenango	3	.....	3
Clinton	4	1	5
Columbia	2	.....	2
Cortland	1	.....	1
Delaware	2	.....	2
Dutchess	8	1	9
Erie	12	3	15
Essex	1	.....	1
Franklin	1	.....	1
Greene	2	.....	2
Herkimer .....	.....	1	1
Jefferson	6	.....	6
Kings	54	6	60
Lewis	1	.....	1
Madison	5	.....	5
Monroe	22	3	25
Montgomery	5	.....	5
New York	201	12	213
Niagara	3	.....	3
Oneida	9	4	13
Onondaga	20	4	24
Ontario	4	.....	4
Orange	5	1	6
Orleans	1	.....	1
Oswego	8	2	10
Otsego	1	.....	1
Putnam	1	.....	1
Queens	7	1	8
Rensselaer	11	1	12
Richmond	7	3	10
Rockland	3	.....	3

Table No. 20—(Concluded)

Showing the residence by counties and classification of patients remaining under treatment September 30, 1901

COUNTIES	PUBLIC		
	Men	Women	Total
St Lawrence	7	.....	7
Saratoga	6	.....	6
Schenectady	1	.....	1
Schoharie	1	.....	1
Schuyler	4	.....	4
Seneca	1	.....	1
Steuben	7	.....	7
Suffolk	11	1	12
Sullivan	2	1	3
Tioga	2	.....	2
Tompkins .....	.....	1	1
Ulster	5	.....	5
Warren	3	.....	3
Washington	7	.....	7
Wayne	5	.....	5
Westchester	40	3	43
Yates	1	.....	1
Total	548	57	605

DANNEMORA STATE HOSPITAL

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Admitted during year ending September 30, 1901	149	.....	149
On original commitments :			
By transfers from county penal institutions	31	.....	31
By transfers from other institutions for insane	118	.....	118
Total number under treatment during year	149	.....	149
Daily average population	111.87	.....	111.87
Capacity of institution	125	.....	125
Discharged during the year :			
As recovered	12	.....	12
As improved	1	.....	1
As unimproved	2	.....	2
As not insane*	3	.....	3
Died	3	.....	3
Whole number discharged during the year ..	21	.....	21
Remaining October 1, 1901	128	.....	128

* Feigned insanity.

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	Nov. 15, 1900
Total acreage of grounds and buildings	About 50 acres
Value of real estate, including buildings....	\$200,000 00
Value of personal property	16,500 00
Acreage under cultivation	None.

Receipts during year, maintenance fund :

From State Treasurer for maintenance on estimates	
1 to 11 inclusive	\$38,525 00
For reimbursing patients (U. S. Gov't patient)....	54 11
Total receipts for maintenance	\$38,579 11

Disbursements during year for maintenance :

Estimate No. 1. For officers' salaries.....	\$4,525 00
Estimate No. 2. For wages	10,030 87
Estimate No. 3. For provisions and stores.....	9,232 11
Estimate No. 4. For ordinary repairs.....	777 54
Estimate No. 5. For farm and grounds	90 00
Estimate No. 6. For clothing and bedding.....	1,540 12
Estimate No. 7. For furniture	141 07
Estimate No. 8. For books and stationery.....	485 16
Estimate No. 9. For fuel and light.....	7,128 17
Estimate No. 10. For medical supplies.....	415 28
Estimate No. 11. For miscellaneous expenses....	2,560 50

Total disbursements, estimates 1 to 11 inclusive	\$36,925 82
--	-------------

Remitted to State Treasurer, sundry receipts, chapter 580, Laws 1899.....	\$54 11
Weekly per capita cost on daily average number of patients, estimates 1 to 11 inclusive	7.2269

Maximum rate of wages paid attendants :

Men	36 00
-----------	-------

Minimum rate of wages paid attendants :

Men	20 00
-----------	-------

Table No. 2—(Concluded)

Proportion of daily attendants to average daily population.....	4.8
Proportion of night attendants to average daily population.....	55.8
Percentage of daily patient population engaged in some kind of useful occupation	43.88
Estimated value of articles made or manufactured by patients during year.....	\$4,456 00
	<hr/> <hr/>

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSI- TION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.) ...	1	.....	1	.....	.....	.....	.....
Mental strain, worry and overwork (not included in above)	1	.....	1	.....	.....	.....	.....
Physical:							
Intemperance	3	.....	3	1	.....	1	2
Venereal diseases ..	1	.....	1	.....	.....	.....	.....
Masturbation	12	.....	12	2	.....	2	10
Accident or injury..	1	.....	1	.....	.....	.....	.....
Epilepsy	1	.....	1	1	.....	1	.....
Abuse of drugs.....	1	.....	1	.....	.....	.....	.....
Heredity	6	.....	6	6	.....	6	6
Congenital defect....	3	.....	3	.....	.....	.....	.....
Unascertained	96	.....	96	7	.....	7	.....
Not insane	3	.....	3	.....	.....	.....	.....
Confinement in prison	20	.....	20	15	.....	15	5
Total	149	.....	149	22	.....	32	23

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901 and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901		
	Admitted	Recovered	Died
Mania, acute delirious.....	1	.....	.....
Mania, acute	9	.....	.....
Mania, recurrent .....	.....	.....	.....
Mania, chronic.....	26	.....	.....
Melancholia, acute.....	2	.....	.....
Melancholia, simple.....	36	12	.....
Melancholia, chronic.....	10	.....	1
Alternating (circular) insanity.....	.....	.....	.....
Paranoia	4	.....	.....
General paralysis.....	.....	.....	.....
Dementia, primary	6	.....	.....
Dementia, terminal.....	27	.....	2
Epilepsy with insanity	1	.....	.....
Imbecility.....	24	.....	.....
Idiocy ..	.....	.....	.....
Not insane*	3	.....	.....

*Includes cases of alcoholism, drug habit, etc.

TABLE No. 5
Showing results of treatment in presumably curable cases for the current year

[illegible]

Table No. 5—(Concluded)

CURABLE CONDITIONS	DISCHARGED RECOVERED DURING YEAR			AVERAGE LENGTH OF TREATMENT OF RECOVERED CASES (LAST ATTACK)				DIED DURING YEAR			TRANSFERRED TO OTHER GROUPS			REMAINING AT CLOSE OF FISCAL YEAR		
	Men	Women	Total	MEN		WOMEN		Men	Women	Total	Men	Women	Total	Men	Women	Total
				Years	Months	Years	Months									
Melancholia in acute forms.	12	...	12	...	5	...	...	...	...	...	25	...	25	...	...	25
	1	...	1	...	...	1

Mania in acute forms.	10	...	10	...	...	10

All other cura- ble forms.	6	...	6	...	...	6

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
One to three months.	1	.....	1	1	.....	1	1	.....	1	1	.....	1
Three to six months.	1	.....	1	7	.....	7	1	.....	1	7	.....	7
Six to nine months.	1	.....	1	4	.....	4	1	.....	1	4	.....	4
Nine months to one year.	2	.....	2	.....	.....	.....	2	.....	2	.....	.....	.....
Eighteen months to two years.	4	.....	4	.....	.....	.....	4	.....	4	.....	.....	.....
Two to three years.	3	.....	3	.....	.....	.....	3	.....	3	.....	.....	.....
Total.	12	.....	12	12	.....	12	12	.....	12	12	.....	12

* Includes cases of alcoholism, opium habit, etc.

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the digestive system :						
Diseases of the intestines	2	.....	2	2	.....	2
Diseases of the respiratory system :						
Diseases of the lungs...	1	.....	1	1	.....	1
Total	3	.....	3	3	.....	3

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch	7	.....	7	7	.....	7
Maternal branch	7	.....	7	7	.....	7
Paternal and maternal branches	2	.....	2	2	.....	2
Collateral branches	10	.....	10	10	.....	10
No hereditary tendency	22	.....	22	22	.....	22
Unascertained	101	.....	101	101	.....	101
Total	149	.....	149	149	.....	149

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	113	.....	113	113	.....	113
Married	29	.....	29	29	.....	29
Widowed	6	.....	6	6	.....	6
Divorced .....	.....	.....	.....	.....	.....	.....
Unascertained	1	.....	1	1	.....	1
Total	149	.....	149	149	.....	149

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	1	.....	1	1	.....	1
Academic	2	.....	2	2	.....	2
Common school	30	.....	30	30	.....	30
Read and write	98	.....	98	98	.....	98
Read only	5	.....	5	5	.....	5
No education	12	.....	12	12	.....	12
Unascertained	1	.....	1	1	.....	1
Total	149	.....	149	149	.....	149

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Three to six months .....	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	1
Six to nine months .....	.....	.....	.....	2	.....	2	.....	.....	.....	2	.....	2
Eighteen months to two years	1	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....
Three to four years	1	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....
Ten to twenty years	1	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....
Total	3	.....	3	3	.....	3	3	.....	3	3	.....	3
Average duration of insane life (giving years and tenths)	11.5						.....	.....	.....	.....	.....	11.5

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCT. 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years ..	10	.....	10	10	.....	10
From 20 to 25 years ..	42	.....	42	42	.....	42
From 25 to 30 years ..	31	.....	31	31	.....	31
From 30 to 35 years ..	20	.....	20	20	.....	20
From 35 to 40 years ..	20	.....	20	20	.....	20
From 40 to 50 years ..	16	.....	16	16	.....	16
From 50 to 60 years ..	9	.....	9	9	.....	9
From 60 to 70 years ..	1	.....	1	1	.....	1
Total	149	.....	149	149	.....	149

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCT. 1, 1888		
	Men	Women	Total	Men	Women	Total
From 20 to 30 years ..	8	.....	8	8	.....	8
From 30 to 40 years ..	4	.....	4	4	.....	4
Total	12	.....	12	12	.....	12

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCT. 1, 1888		
	Men	Women	Total	Men	Women	Total
From 20 to 25 years ..	1	.....	1	1	.....	1
From 35 to 40 years ..	2	.....	2	2	.....	2
Total	3	.....	3	3	.....	2

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month	14	.....	14
One to three months	8	.....	8
Three six months	7	.....	7
Six to nine months	14	.....	14
Nine months to one year	11	.....	11
One year to eighteen months	12	.....	12
Eighteen months to two years	12	.....	12
Two to three years	25	.....	25
Three to four years	6	.....	6
Four to five years	4	.....	4
Five to ten years	17	.....	17
Ten to fifteen years	9	.....	9
Fifteen to twenty years	3	.....	3
Twenty to thirty years	1	.....	1
Thirty years and upwards	1	.....	1
Not insane*	3	.....	3
Unascertained	8	.....	8
Total	149	.....	149

*Includes cases of alcoholism, morphia habit, etc.

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	6	.....	6
One to three months	10	.....	10
Three to six months	10	.....	10
Six to nine months	102	.....	102
Total	128	.....	128

TABLE No. 17
Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc	2	.....	2	2	.....	2
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc	7	.....	7	7	.. ..	7
Agricultural and pastoral:						
Farmers, gardeners, herdsmen, etc	16	.....	16	16	.....	16
Mechanics at out-door vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc	10	.....	10	10	.....	10
Mechanics, etc., at sedentary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc	35	.....	35	35	.....	35

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
United States.....	89	.....	89	89	.....	89
Italy.....	14	.....	14	14	.....	14
Ireland.....	12	.....	12	12	.....	12
Germany.....	9	.....	9	9	.....	9
Russia.....	6	.....	6	6	.....	6
Austro-Hungary.....	5	.....	5	5	.....	5
Canada.....	4	.....	4	4	.....	4
England.....	4	.....	4	4	.....	4
British West Indies.....	1	.....	1	1	.....	1
Algeria.....	1	.....	1	1	.....	1
China.....	1	.....	1	1	.....	1
Greece.....	1	.....	1	1	.....	1
Sweden.....	1	.....	1	1	.....	1
Switzerland.....	1	.....	1	1	.....	1
Total.....	149	.....	149	149	.....	149

Of the total number admitted since the first of October, 1888, the parents of 60.40 per cent were both of foreign birth.

In 4.02 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 2.68 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany	4	.....	4
Cattaraugus	3	.....	3
Chautauqua	2	.....	2
Chenango	1	.....	1
Delaware	1	.....	1
Dutchess	4	.....	4
Erie	9	.....	9
Franklin	2	.....	2
Fulton	1	.....	1
Herkimer	1	.....	1
Jefferson	3	.....	3
Kings	17	.....	17
Madison	2	.....	2
Monroe	3	.....	3
New York	67	.....	67
Oneida	3	.....	3
Onondaga	6	.....	6
Ontario	1	.....	1
Queens	4	.....	4
Rensselaer	3	.....	3
Richmond	2	.....	2
St Lawrence	1	.....	1
Saratoga	1	.....	1
Schoharie	1	.....	1
Suffolk	2	.....	2
Ulster	1	.....	1
Westchester	4	.....	4
Total	149	.....	149

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	PUBLIC		
	Men	Women	Total
Albany	4	.....	4
Cattaraugus	2	.....	2
Chautauqua	2	.....	2
Chenango	1	.....	1
Delaware	1	.....	1
Dutchess	4	.....	4
Erie	7	.....	7
Franklin	2	.....	2
Fulton	1	.....	1
Herkimer	1	.....	1
Jefferson	2	.....	2
Kings	15	.....	15
Madison	2	.....	2
Monroe	3	.....	3
New York	56	.....	56
Oneida	2	.....	2
Onondaga	5	.....	5
Ontario	1	.....	1
Queens	3	.....	3
Rensselaer	3	.....	3
Richmond	2	.....	2
St Lawrence	2	.....	2
Saratoga	1	.....	1
Suffolk	1	.....	1
Ulster	1	.....	1
Westchester	4	.....	4
Total	128	.....	128

TABLE No. 21

Patients received by transfer from other hospitals.....	118
Chronic and incurable cases admitted	96
Acute cases admitted	53
Ratio of recoveries to acute cases admitted	1 to 4 5-12

OFFICIAL DIRECTORY OF STATE HOSPITALS AND PRIVATE
INSTITUTIONS FOR THE INSANE

REVISED TO OCTOBER 1, 1901

State of New York—State Commission in Lunacy

Address official communications to the State Commission in Lunacy

COMMISSIONERS

Frederick Peterson, M. D., President, 4 West 50th street, New York. Telephone 779 38th street.

William L. Parkhurst, Canandaigua, N. Y. Long-distance Telephone.

SECRETARY

T. E. McGarr, Capitol, Albany. Residence, No. 37 Lake avenue, Albany. Telephone, 58 West. General office telephone 1237.

AUDITOR

George D. Sanford.

Total number in State hospitals, 23,387; total number in private institutions, 943; total, 24,330.

STATE HOSPITAL SYSTEM

ADMISSION OF PRIVATE PATIENTS TO STATE
HOSPITALS

Private patients can be admitted to State hospitals only upon consent of the medical superintendents. Rates for private patients range from six to ten dollars per week and a bond must be provided guaranteeing payment of accounts for maintenance.

UTICA STATE HOSPITAL—UTICA, ONEIDA COUNTY

Number patients, men 552, women 596, total 1,148; number employees, men 115, women 115, total 230.

Harold L. Palmer, M. D., Medical Superintendent.

George H. Torney, Jr., M. D., First Assistant Physician.

Edward G. Stout, M. D., Second Assistant Physician.

Clarence J. Slocum, M. D., Assistant Physician.

Julius E. Haight, M. D., Medical Interne.

Clara Smith, M. D., Woman Physician.

President Board of Managers, W. Stuart Walcott, New York Mills, N. Y. Telephone 604 A.

Steward, C. A. Mosher.

Treasurer, Harry S. Patten, Utica.

Counsel, James S. Sherman, No. 81 Genesee street, Utica. Telephone 902.

One mile from the New York Central, the Rome, Watertown and Ogdensburg, the Delaware, Lackawanna and Western, and the Ontario and Western railway stations, and two miles from the West Shore station. Accessible every 15 minutes, by New York Mills or Whitesboro electric cars. Stop at cross or junction of Whitesboro and Court streets.

Graycroft and Cragside, agricultural colonies, are situated about a mile and a half from the hospital. Accessible by special conveyance.

Hospital long-distance telephone No. 945.

WILLARD STATE HOSPITAL—WILLARD, SENECA COUNTY

Number patients, men 1,131, women 1,106, total 2,237; number employees, men 235, women 235, total 470.

Wm. Austin Macy, M. D., Medical Superintendent.

William L. Russell, M. D., First Assistant Physician.

Thomas J. Currie, M. D., Second Assistant Physician.

Robert E. Doran, M. D., Assistant Physician.

Charles F. Sanborn, M. D., Assistant Physician.

John W. Russell, M. D., Assistant Physician.

Donald L. Ross, M. D., Assistant Physician.

Erving Holley, M. D., Junior Assistant Physician.

J. Ernestine Hills, M. D., Woman Assistant Physician.

Theodore W. Simon, M. D., Medical Interne.

Wm. H. Montgomery, M. D., Medical Interne.

President Board of Managers, Stephen H. Hammond, Geneva.

Local telephone 315.

Steward, M. J. Gilbert.

Treasurer, Henry Peterson, Ovid, N. Y.

Counsel, S. S. Partridge, Phelps, N. Y. Local telephone.

Accessible, from the east, by New York Central and Hudson River railway (Auburn branch from Syracuse to Geneva); from the west, via New York Central and Hudson River railway, from Rochester (Auburn branch) to Geneva, or via Lehigh Valley railway; from the north, Lyons to Geneva, via Fall Brook railway; from Geneva via steamers of the Seneca Lake Steam the west, via New York Central and Hudson River railway, from the south, via Lehigh Valley railway or by Seneca Lake Steam Navigation Company steamers (in summer).

This hospital is most conveniently reached via Hayt's Corners. A hotel is located near the hospital grounds.

Hospital long-distance telephone, Willard, N. Y. Telegraph office at hospital.

HUDSON RIVER STATE HOSPITAL—POUGHKEEPSIE,
DUTCHESS COUNTY

Number patients, men 981, women 1,123, total 2,104; number employees, men 238, women 182, total 420.

Charles W. Pilgrim, M. D., Medical Superintendent.

Thomas E. Bamford, M. D., First Assistant Physician.

Charles H. Langdon, M. D., Second Assistant Physician.

Isham G. Harris, M. D., Assistant Physician.

Samuel F. Mellen, M. D., Assistant Physician.

Louis T. Waldo, M. D., Junior Assistant Physician.

John G. Elliott, M. D., Junior Assistant Physician.

Edward L. Hanes, M. D., Junior Assistant Physician.

John H. Acheson, M. D., Medical Interne.

Wm. J. Cavanaugh, M. D., Medical Interne.

Emma Putnam, M. D., Woman Assistant Physician.

President Board of Managers, Frank B. Lown, No. 54 Market street.

Steward, L. P. Gillespie.

Treasurer, Allison Butts. Telephone No. 21, Poughkeepsie, N. Y.

Counsel, H. M. Taylor, Poughkeepsie. Address, 52 Market street.

The hospital is located two miles north of the New York Central railway station at Poughkeepsie.

Carriages may be procured at the station, or a North side trolley car may be taken to the junction of the Poughkeepsie and Eastern railway, on North street, from which point passenger trains run directly to the hospital as follows:

WEEK DAY TRAINS

Leave North street for hospital:

A. M.	A. M.	A. M.	A. M.	P. M.	P. M.	P. M.	P. M.	P. M.	P. M.
6.50	7.50	9.50	10.45	1.45	2.15	4.15	5.15	8.10	9.45

Leave hospital for North street:

A. M.	A. M.	A. M.	A. M.	P. M.	P. M.	P. M.	P. M.	P. M.	P. M.
7.00	8.00	10.00	11.00	2.00	4.00	5.00	6.00	8.20	9.51

SUNDAY TRAINS

Leave North street for hospital:

A. M.	A. M.	P. M.	P. M.	P. M.	P. M.	P. M.
7.50	9.50	12.45	2.00	4.15	5.15	9.45

Leave hospital for North street:

A. M.	A. M.	P. M.	P. M.	P. M.	P. M.	P. M.
8.00	10.00	1.45	4.00	5.00	6.00	9.51

The hospital may also be reached by the West Shore Railway ferry from Highland station to Poughkeepsie, and by the Philadelphia, Reading and New England Railway (Poughkeepsie

bridge route). Conveyances may be procured from the Park avenue station, or the train may be taken at North street to the hospital grounds as previously mentioned.

Hospital long-distance telephone No. 171.

Telegraph office at hospital.

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL—MIDDLETOWN, ORANGE COUNTY

Number patients, men 592, women 645, total 1,237; number employees, men 154, women 109, total 263.

Selden H. Talcott, M. D., Superintendent.

Maurice C. Ashley, M. D., First Assistant Physician.

Robert C. Woodman, M. D., Second Assistant Physician.

David E. Francisco, M. D., Assistant Physician.

Edward A. Everett, M. D., Assistant Physician.

Reeve Turner, M. D., Junior Physician.

Clara Barrus, M. D., Woman Physician.

Thomas M. Thayer, M. D., Medical Interne.

President Board of Managers, Uzal T. Hayes, Middletown, N. Y.

Steward, Henry J. Leonard.

Treasurer, Edward D. Tompkins, Middletown, N. Y.

Counsel, John B. Swezey, Goshen, N. Y.

Middletown is 66 miles from New York city, and may be reached by the following railways: New York, Ontario and Western, Erie, and New York, Susquehanna and Western. Electric cars run between Middletown and the hospital. Public carriages may also be had at the station. Hospital long-distance telephone No. 41.

BUFFALO STATE HOSPITAL—BUFFALO, ERIE COUNTY

Number patients, men 853, women 1,060, total 1,913; number employees, men 156, women 170, total 326.

Arthur W. Hurd, M. D., Medical Superintendent.

Henry P. Frost, M. D., First Assistant Physician.

George G. Armstrong, M. D., Second Assistant Physician.

Walter H. Conley, M. D., Assistant Physician.

Joseph B. Betts, M. D., Assistant Physician.

Edwin A. Bowerman, M. D., Assistant Physician.

C. J. Patterson, M. D., Junior Assistant Physician.

Edward G. Aldrich, M. D., Junior Assistant Physician.

Helene Kuhlmann, M. D., Woman Assistant Physician.

Vacancy, Medical Interne.

President Board of Managers, Joseph P. Dudley. Address, 19 East Swan street. Long-distance telephone "Bryant 216."

Steward, John E. Culp.

Treasurer, Morton K. McMillan, Room 602 Ellicott Square, Buffalo, N. Y.

Counsel, John E. Pound, Lockport, N. Y. Address, 71 Main street. Long-distance telephone "Lockport 231."

The hospital is located on Forest avenue, about three and one-half miles from the principal railway stations; accessible by Elmwood avenue and "Baynes and Hoyt" street trolley lines direct; also by Main street and Niagara street lines by obtaining transfer to the Forest avenue cars.

Hospital long-distance telephone "Bryant 262."

BINGHAMTON STATE HOSPITAL—BINGHAMTON, BROOME COUNTY.

Number patients, men 643, women 707, total 1,350; number employees, men 160, women 145, total 305.

Charles G. Wagner, M. D., Medical Superintendent.

William A. White, M. D., First Assistant Physician.

Arthur P. Summers, M. D., Second Assistant Physician.

H. W. Eggleston, M. D., Assistant Physician.

Edward Gillespie, M. D., Assistant Physician.

Mary O'Malley, M. D., Woman Assistant Physician.

Irving Lee Walker, M. D., Medical Interne.

President Board of Managers, William Mason. Address, 97 Clinton street, Binghamton, N. Y. Telephone No. 412b.

Steward, Edwin Evans.

Treasurer, Clark Z. Otis, Binghamton, N. Y.

Counsel, Harvey Hinman, Binghamton, N. Y. Telephone No. 273.

Located on the lines of the Erie, Delaware, Lackawanna and Western, and Delaware and Hudson railways. Electric cars leave corner of Court and State streets, every 20 minutes.

Hospital long-distance telephone No. 453.

ST. LAWRENCE STATE HOSPITAL—OGDENSBURG,
ST. LAWRENCE COUNTY

Number patients, men 883, women 788, total 1,671; number employees, men 165, women 176, total 341.

William Mabon, M. D., Medical Superintendent.

R. H. Hutchings, M. D., First Assistant Physician.

Warren L. Babcock, M. D., Second Assistant Physician.

E. M. Somers, Jr., M. D., Assistant Physician.

Sidney D. Wilgus, M. D., Assistant Physician.

Roy L. Leak, M. D., Junior Assistant Physician.

Caroline S. Pease, M. D., Woman Assistant Physician.

Charles M. Burdick, Medical Interne.

Nishan A. Pashayan, Medical Interne.

President Board of Managers, W. H. Daniels. Address, 163 State street, Ogdensburg, N. Y. Telephone 314.

Steward, William C. Hall.

Treasurer, James M. Wells, Ogdensburg, N. Y.

Counsel, George R. Malby, Ogdensburg, N. Y.

Located three and one-half miles from centre of Ogdensburg on the Rome, Watertown and Ogdensburg, and Central Vermont railways. Accessible by trolley line every half-hour. Public carriages may also be obtained at railway stations.

Hospital long-distance telephone "State hospital."

ROCHESTER STATE HOSPITAL—ROCHESTER, MONROE
COUNTY

Number patients, men 265, women 316, total 581; number employees, men 61, women 56, total 117.

E. H. Howard, M. D., Medical Superintendent.

E. B. Potter, M. D., First Assistant Physician.

C. T. LaMoure, M. D., Assistant Physician.

E. P. Ballantine, M. D., Woman Assistant Physician.

Howard A. LaMoure, M. D., Medical Interne.

President Board of Managers, Frederick Cook. Address, 19 W. Main street. Rochester telephone No. 323.

Steward, W. S. Remington.

Matron, Miss M. E. May.

Treasurer, Frederick P. Allen, Rochester, N. Y. Rochester telephone No. 3063.

Counsel, J. M. E. O'Grady, Rochester. Address, 211 E. & B. Building. Rochester telephone No. 1384.

Two miles from railway stations. Accessible by Reservoir electric cars of the St. Paul and South avenue line.

Bell long-distance telephone No. 602.

Rochester telephone No. 3100.

LONG ISLAND STATE HOSPITAL—KINGS PARK, L. I.

Number patients, men 1,213, women 1,569, total 2,782; number employees, men 307, women 258, total 565.

Oliver M. Dewing, M. D., Superintendent.

George O'Hanlon, M. D., First Assistant Physician.

Paul G. Taddiken, M. D., Second Assistant Physician.

Arthur J. Capron, M. D., Assistant Physician.

Theodore I. Townsend, M. D., Assistant Physician.

W. H. Hagenbuch, M. D., Assistant Physician.

Bryan G. Williams, M. D., Assistant Physician.

D. C. MacClymont, M. D., Junior Physician.

John R. Harding, M. D., Junior Physician.

B. Ross Nairn, M. D., Junior Physician.

Ethan A. Nevin, M. D., Junior Physician.

Menas S. Gregory, M. D., Junior Physician.

Anna Craig, M. D., Woman Physician.

Vacancy, Medical Interne.

Vacancy, Medical Interne.

President Board of Managers, Alexander E. Orr, 102 Produce Exchange, New York.

Vice-President, John G. Deubert, 853 Broadway, New York city.

Purchasing Steward, F. A. Wheeler, 309 Broadway, New York city. Telephone 1788 Franklin.

Resident Steward, Charles S. Pitcher.

Treasurer, Henry E. Abell, Jr., Franklin Trust Co. Building, Brooklyn, N. Y.

Counsel, Marcus B. Campbell, 26 Court street, Brooklyn. Telephone "2666 Main."

Forty-five miles from New York city. Accessible by trains on the Long Island Railway. Surface and elevated road from Grand Central station, New York, to Thirty-fourth street ferry, connecting with Long Island City station of the Long Island Railway. Also from Flatbush Avenue station, via Jamaica, Long Island Railway. Railroad tickets at reduced rate can be obtained at the hospital or at the treasurer's office.

Hospital long-distance telephone No. 11 Northport.

Telegraph office at hospital.

FULL SCHEDULE OF TRAINS.

For Kings Park.

Leaves	A. M.	A. M.	A. M.	P. M.	P. M.	P. M.	P. M.
Long Island City....	5.54	9.06	11.10	3.37	4.40	5.42	6.40
Sundays, 9 a. m.; 10.02 a. m.; 5.34 p. m.; 6.34 p. m.							

Leaves	A. M.	A. M.	A. M.	P. M.	P. M.	P. M.	P. M.
Flatbush avenue....	5.50	8.54	11.04	3.22	4.36	5.39	6.33

Sundays, 8.53 a. m.; 9.53 a. m.; 5.25 p. m.; 6.24 p. m.

From Kings Park.

Leaves	A. M.	A. M.	A. M.	A. M.	P. M.	P. M.	P. M.
Kings Park	6.07	6.58	7.40	9.11	2.11	3.53	6.33
Sundays, 7.48 a. m.; 4.20 p. m.; 6.35 p. m.; 8.46 p. m.							

BROOKLYN DEPARTMENT—Flatbush, L. I.

Number patients, men 417, women 775, total 1,192; number employees, men 103, women 126, total 229.

R. M. Elliott, M. D., Superintendent.

Ira O. Tracy, M. D., First Assistant Physician.

D. Edward Warren, M. D., Second Assistant Physician.

Edward L. Parker, M. D., Junior Physician.

Caroline M. Stengel, M. D., Woman Physician.

Vacancy, Medical Interne.

Wm. L. Buck, Resident Steward.

Mrs. Mary P. Johnson, Matron.

Accessible by street car from East Twenty-third street and Fulton ferries; Fulton street car from Brooklyn bridge to Nostrand avenue, thence to Flatbush.

Hospital long-distance telephone No. 68, Flatbush.

MANHATTAN STATE HOSPITAL

WARD'S ISLAND, NEW YORK CITY, AND CENTRAL ISLIP, L. I.

President Board of Managers, Henry E. Howland. Long-distance telephone 1696 18th Street.

Purchasing Steward, F. A. Wheeler, 309 Broadway, New York. Telephone 1788 Franklin.

Treasurer, W. H. Kimball, 35 Nassau street, New York.

Counsel, George C. Austin, 192 Broadway, New York city. Long-distance telephone 4471 Cortlandt.

MANHATTAN STATE HOSPITAL, EAST

WARD'S ISLAND

Number patients, men 1,967; number employees, men 341, women 10, total 351.

All official communications with regard to the Manhattan State Hospital, East, should be addressed to the Superintendent.

Post-office address, Station U, New York city.

Hospital long-distance telephone 1872 Harlem.

City office, 1 Madison avenue, corner of Twenty-third street.

Long-distance telephone 1696 18th.

Visiting days, Mondays, Tuesdays, Fridays and Saturdays. Passes can be obtained at hospital or at the city office, No. 1 Madison avenue.

A. E. Macdonald, M. D., Superintendent.

Jno. T. W. Rowe, M. D., First Assistant Physician.

Louis C. Pettit, M. D., Second Assistant Physician.

D. S. Spellman, M. D., Assistant Physician.

John W. Wickliffe, M. D., Assistant Physician.

J. Rudolph Knapp, M. D., Junior Physician.

Arthur B. Wright, M. D., Junior Physician.

C. Floyd Haviland, M. D., Junior Physician.

Chester L. Carlisle, M. D., Junior Physician.

Frank L. Crosvenor, M. D., Junior Physician.

Alton L. Smiley, M. D., Junior Physician.

Jerome E. Young, M. D., Medical Interne.

Robert J. Pye, Resident Steward.

MANHATTAN STATE HOSPITAL, WEST

WARD'S ISLAND DIVISION

Number patients, men 200, women 1,806, total 2,006; number employees, men 93, women 244, total 337.

BLACKWELL'S ISLAND DIVISION.

Number patients, women 830; number employees, men 27, women 97, total 124. Total number patients, men 200, women 2,636, total 2,836; total number employees, men 120, women 341, total 461.

E. C. Dent, M. D., Superintendent.

Herman C. Evarts, M. D., First Assistant Physician.

George B. Campbell, M. D., Second Assistant Physician.

William B. Moseley, M. D., Assistant Physician.

Reuben F. Monette, M. D., Assistant Physician.

Horatio G. Gibson, M. D., Assistant Physician.

Arthur C. Delacroix, M. D., Assistant Physician.

Hunter A. Bond, M. D., Assistant Physician.

Frank H. Magness, M. D., Assistant Physician.

Louis Walther, M. D., Assistant Physician.

Anton Heger, M. D., Junior Physician.

Anna E. Hutchinson, M. D., Woman Physician.

Charles P. Frischbier, M. D., Medical Interne.

Wellington A. Crofoot, M. D., Medical Interne.

Resident Steward, Lewis Webb.

Matron, Annie F. Jestley.

Post-office address, Station U, New York city. Hospital long-distance telephone: Ward's Island, 1869 Harlem.

Visiting days—At Ward's Island: Mondays, Tuesdays, Fridays and Saturdays. Blackwell's Island: Thursdays only. Accessible by steamer from foot of East One Hundred and Sixteenth street.

Visiting hours: 1 to 3 p. m.

Passes can be obtained at the hospital or at the city office, No. 1 Madison avenue.

MANHATTAN STATE HOSPITAL—CENTRAL ISLIP, SUFFOLK COUNTY

Number patients, men 895, women 399, total 1,294; number employees, men 154, women 59, total 213.

G. A. Smith M. D., Medical Superintendent.

M. B. Heyman, M. D., Second Assistant Physician.

C. G. Brink, M. D., Assistant Physician.

R. W. Fowler, M. D., Junior Physician.

W. G. Ryon, M. D., Junior Physician.

M. B. Ruggles, Jr., M. D., Medical Interne.

E. T. Murray, M. D., Medical Interne.

Resident Steward, W. J. McKee.

Hospital long-distance telephone 19 Islip. Telegraph, Central Islip, L. I.

SCHEDULE OF TRAINS

For Central Islip

	A. M.	A. M.
Leave Long Island City	8.40	11.10
Sundays, 9.14 a. m.		

From Central Islip

	P. M.	P. M.
Leave Central Islip	2.14	4.51
Sundays, 5.56 p. m.		

Railroad tickets at reduced rates can be obtained at the hospital or at the city office, No. 1 Madison avenue.

GOWANDA STATE HOMEOPATHIC HOSPITAL—GOWANDA, ERIE COUNTY

Number patients, men 167, women 184, total 351; number employees, men 52, women 27, total 79.

Daniel H. Arthur, M. D., Superintendent.

George F. Adams, M. D., First Assistant Physician.

Clarence A. Potter, M. D., Junior Physician.

President Board of Managers, Eugene H. Porter, M. D., 181 West Seventy-third street, New York city.

Steward, Earl R. Quackenbush.

Matron, Olive A. Carpenter.

Secretary and Treasurer, Fred J. Blackmon, 626-630 Ellicott Square, Buffalo, N. Y. Long-distance telephone "Seneca 426."

Counsel, Charles W. Terry, Randolph, N. Y.

Hospital two miles from Gowanda, on Buffalo and Jamestown branch of Erie railroad. Accessible by carriage from Gowanda.

Hospital long-distance telephone at Gowanda No. 27.

MATTEAWAN STATE HOSPITAL—MATTEAWAN, DUTCHESS
COUNTY

(For insane committed on orders of courts of criminal jurisdiction and persons convicted of petty crimes or misdemeanors—not felons—becoming insane while undergoing sentence.)

Number patients, men 548, women 57, total 605; number employees, men 101, women 19, total 120.

Post-office and railroad station, Fishkill-on-the-Hudson.

H. E. Allison, M. D., Medical Superintendent.

Flavius Packer, M. D., First Assistant Physician.

Walter M. Clark, M. D., Assistant Physician.

Jesse M. W. Scott, M. D., Junior Assistant Physician.

Frank G. Weigand, M. D., Medical Interne.

Fifty-eight miles from New York city, on the New York Central and Hudson River railway. It is also accessible by the West Shore railway and the Erie, to Newburg; thence by ferry to Fishkill-on-the-Hudson. The institution may be reached by an electric railway, which runs within one-half mile, from the Hudson River railway station; also public conveyances at the station.

Hospital long-distance telephone call No. 36.

DANNEMORA STATE HOSPITAL—DANNEMORA, CLINTON
COUNTY

Number patients, men 123; number employees, men 39, women, 3, total 42.

Robert B. Lamb, M. D., Medical Superintendent.

Charles H. North, M. D., Assistant Physician.

Amos T. Baker, M. D., Medical Interne.

Located at Dannemora, N. Y., on the Chateaugay railroad,
seventeen miles from Plattsburg.

Long-distance telephone "State hospital."

PATHOLOGICAL INSTITUTE FOR THE STATE HOS-
PITALS—No. 1 MADISON AVENUE, NEW YORK

Vacancy, Director.

Henderson B. Deady, M. D., Chief Associate in Pathology.

Henry Lyle Winter, M. D., Associate in Anthropology.

Boris Sidis, M. A., Ph.D., Associate in Psychology and Psycho-
pathology.

Bronislauf Onuf, M. D., Associate in Pathology.

Vacancy, Associate in Biology.

Henry H. Brooks, M. D., Associate in Bacteriology.

*Phoebus A. Levene, M. D., Associate in Physiological Chem-
istry.

S. Bookman, M. A., Ph.D., Associate in Physiological Chem-
istry.

*C. Judson Herrick, A. B., Associate in Comparative Neurol-
ogy.

W. R. Van Koughnet, Secretary.

C. C. Holcomb, Medical Stenographer.

Eugenie Kruszezski, Special Attendant.

Long-distance telephone call 1728-18.

* On leave of absence.

LICENSED PRIVATE ASYLUM SYSTEM

SOCIETY OF THE NEW YORK HOSPITAL—BLOOMINGDALE,
WHITE PLAINS, N. Y.

S. B. Lyon, M. D., Medical Superintendent.

Accessible by Harlem railway. Number of patients, 330. Minimum for those who pay remunerative rates, ten dollars per week. This institution receives and treats, gratuitously, a small number of indigent insane, and receives a considerable number of acute and hopeful cases, which pay only part of their expenses.

Long-distance telephone No. 104, White Plains.

New York office 10 West Sixteenth street, at noon.

New York telephone 4247 18th.

PROVIDENCE RETREAT—BUFFALO, ERIE COUNTY

(Under the charge of the Sisters of Charity.)

Harry A. Wood, M. D., Physician in Charge.

John J. Twohey, M. D., Assistant Physician.

Located on Main street, corner of Kensington avenue. Distance from Union railway station, four miles. Accessible by electric street car line. Number of patients limited to 125. Minimum rate for care and treatment of private patients, \$10 per week.

Long-distance telephone "Park 49."

MARSHALL SANITARIUM—TROY, RENSSELAER COUNTY

Hiram Elliott, M. D., Physician in Charge.

Warren H. Everett, M. D., Assistant Physician.

Situated on Linden avenue, one mile from Union railway station. Accessible by electric street car line direct from depot and from the terminus of the Troy and Albany electric road. Number of patients limited to 90. Minimum rate, \$7 per week.

Long-distance telephone "937 Troy."

LONG ISLAND HOME—AMITYVILLE, LONG ISLAND

O. J. Wilsey, M. D., Physician in Charge.

Thirty-two miles from New York. Accessible by Montauk division of the Long Island railway, ferry from East Thirty-fourth street, New York, also from Brooklyn. Only five minutes from railway station. Number of patients limited to 114. Monday, Wednesday and Friday, 1.30 to 2.30 p. m., 130 East Thirty-sixth street, New York. Telephone 2955-38th street. Minimum rate \$10 per week.

Long-distance telephone No. 2-M, Amityville.

BRIGHAM HALL HOSPITAL—CANANDAIGUA, ONTARIO COUNTY

D. R. Burrell, M. D., Physician in Charge.

Situated on Bristol street, one mile from the New York Central and Northern Central railway station. Accessible by public carriages, always to be found at the station. Number of patients limited to 78. Minimum rate, \$12 per week.

Long-distance telephone No. 35, or "Brigham Hall."

SANFORD HALL—FLUSHING, NEW YORK CITY

W. Stuart Brown, M. D., Physician in Charge.

Alvin W. Klein, M. D., Assistant Physician.

Situated about one-quarter of a mile from Long Island railway station, and easily accessible by carriages from any part of Greater New York. In coming from Borough of Manhattan take ferry at East Thirty-fourth street, and train to Flushing, Main street. From Borough of Brooklyn take Flushing avenue trolley for Flushing.

Dr. Brown may be seen at the office in Borough of Manhattan, No. 56 West Fifty-sixth street, on Tuesday or Friday, between 10 and 12. Number of patients limited to 44. Minimum rate, \$25 per week.

Long-distance telephone "17 Flushing."

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ST. VINCENT'S RETREAT—HARRISON, WESTCHESTER COUNTY

(Under the charge of the Sisters of Charity.)

H. Ernst Schmid, M. D., Attending Physician, White Plains.

Swepson J. Brooks, M. D., Physician in Charge.

For women only. Fifty minutes from New York on the New York and New Haven railway. Trains leave Grand Central station, New York city, for Harrison every hour, from 9 a. m. to 7 p. m. Number of patients limited to 60. Applications for admission should be made to the sister in charge.

Long-distance telephone No. 78 "Mamaroneck."

BREEZEHURST TERRACE—WHITESTONE, NEW YORK CITY,
LONG ISLAND

D. A. Harrison, M. D., Physician in Charge.

D. R. Lewis, M. D., Assistant Physician.

Accessible from New York city, from East Thirty-fourth street ferry, via Long Island railroad. From James slip near the Brooklyn Bridge to Long Island City. Trains run every half hour to Whitestone, time 25 minutes. May also be reached by driving, via Ninety-ninth street ferry to College Point, from which place it is about ten minutes' drive. Going from Brooklyn, take Greenpoint car or Crosstown car to Long Island City or Corona; thence to Long Island railroad. In taking patients from Brooklyn, it is better to drive, as it only takes a little more than one hour, via Grand street to Newtown, thence through Flushing to Whitestone. Cars arrive from Brooklyn in one hour. Minimum rate, \$20 per week.. Number limited to thirty. (Voluntary patients received.) Breezehurst Terrace, five minutes' walk from Whitestone station.

Brooklyn office, 2 Sydney Place. New York office, 110 West Fifty-seventh street.

Sanitarium telephone Whitestone 46 F-Flushing.

New York city telephone, 260 Columbus.

DR. WELLS' SANITARIUM FOR MENTAL DISEASES—945

ST. MARK'S AVENUE, BROOKLYN

(Between Kingston and Albany avenues)

Thomas L. Wells, M. D., Physician in Charge.

V. E. Taylor, M. D., Assistant Physician.

The Sanitarium may be reached by the Bergen street car line, the Atlantic avenue railway or elevated railway from Brooklyn Bridge. Stop at Albany avenue station of elevated road. Number limited to sixteen women patients. Minimum rate, \$10 per week.

Long-distance telephone No. 69, Bedford.

WALDEMERE—MAMARONECK, WESTCHESTER COUNTY

E. N. Carpenter, M. D., Physician in Charge.

J. P. Greene, M. D., Assistant Physician.

Forty minutes from New York on the New York, New Haven and Hartford railway. Trains leave Grand Central station, New York city, every hour, for Mamaroneck. (Voluntary patients received.) Waldmere is one and one-half miles from the station, where public carriages may be found. Number of patients limited to 12. Minimum rate, \$25 per week. House is conducted on private family plans, and only selected cases of mental diseases are received. Dr. Carpenter will be at 110 West Fifty-seventh street, New York city, from 9 to 11 a. m. each day, and by appointment.

New York telephone, 260 Columbus.

GREENMONT-ON-THE-HUDSON—POST OFFICE, OSSINING,
WESTCHESTER COUNTY

Ralph Lyman Parsons, M. D., Physician in Charge.

Ralph Wait Parsons, M. D., Associate Physician.

Location one mile from New York Central railroad station at Ossining. Public carriages may be hired at the station, or

a private carriage will be sent by appointment. Only selected cases of mental or nervous diseases are received, and the number is limited to ten. Minimum rate of board, services of a private nurse, medical care and treatment, including Hydrotherapy, \$75 per week. Communication by telegraph or telephone, through the Ossining office. Dr. Parsons, or his associate, will be at No. 21 East Forty-fourth street, on Mondays and Fridays, between half past three and half past four o'clock p. m., or by appointment.

Long-distance telephone Ossining, 162 b.

DR. MACDONALD'S HOUSE—PLEASANTVILLE, WESTCHESTER
COUNTY

Carlos F. MacDonald, M. D., Proprietor and Physician in Charge.

Robert E. Ruedy, M. D., Resident Assistant Physician.

One mile from Pleasantville station on Harlem railway; two miles from Briar Cliff station on New York and Northern railway; six miles from Tarrytown and four miles from Ossining (formerly Sing Sing), on Hudson River division New York Central railway. Pleasantville is thirty miles (one hour) north of New York city. Number of patients limited to 10. House is conducted on the private family plan and only selected cases of mental disease are received. Rates on application. Telegraph, Pleasantville. Dr. MacDonald will be at 85 Madison avenue, New York city, daily except Sunday from 11 to 1 o'clock.

New York telephone call "866 Madison Square."

Pleasantville telephone call "No. 4 Pleasantville."

THE PINES—AUBURN, CAYUGA COUNTY

Frederick Sefton, M. D., Physician in Charge.

Guy R. Montgomery, M. D., Assistant Physician.

Accessible by the Auburn branch of the New York Central and Hudson River railway, and the Southern Central division

of the Lehigh Valley railway. A little over three hours by rail from Rochester, four from Albany and Buffalo, seven from New York city. Number of patients limited to 12. Rates per week, including medical attendance, special nurse, private room and special tray service, on application.

Long-distance telephone No. 261.

VERNON HOUSE—BRONXVILLE, WESTCHESTER COUNTY

William D. Granger, M. D., Physician in Charge.

Post office and telegraph, Bronxville, N. Y. Fifteen miles from Grand Central station, New York city. Two railroads. First, Harlem railroad to Bronxville. Conveyance by public carriage. Trains every half hour. Twenty-eight minutes. Second, New Haven railroad to Mt. Vernon. Electric cars meet each train, direct to Vernon House, (ask for Traction Company's cars). Trains every even hour. Twenty-six minutes. Number of patients limited to 12. Minimum price, \$40 per week. New York office, 343 Madison avenue. Tuesdays and Thursdays, 3 to 4 p. m.

Long-distance telephone 34 B Mount Vernon.

INTERPINES—GOSHEN, ORANGE COUNTY

Frederick Whittlesey Seward, M. D., Physician in Charge.

Frederick W. Seward, Jr., M. D., Assistant Physician.

Sixty miles from New York city, by Erie railway. Eight hundred feet above tide water. Number limited to 56. Voluntary and committed cases received. Minimum rate, \$20 per week.

J. Perry Seward, M. D., Associate Physician at New York office, 113 West Eighty-fifth street.

Long-distance telephone 3 Goshen.

GLENMARY—OWEGO, TIOGA COUNTY

(Homeopathic. Incorporated 1897)

J. T. Greenleaf, M. D., Physician in Charge.

G. J. Gannett, M. D., Assistant Physician.

Three-fourths of a mile from railway stations, where public carriages may be obtained. Accessible by New York, Lake Erie and Western, and by Delaware, Lackawanna and Western railways, and Auburn Division, Lehigh Valley Railway. Number of patients limited to 50. Minimum rate, \$10 per week.

Long-distance telephone call "77" Owego, N. Y.

FALKIRK—CENTRAL VALLEY, ORANGE COUNTY

James F. Ferguson, M. D., Physician in Charge.

Archibald Campbell, M. D., Assistant Physician.

Henry A. Ferguson, M. D., Assistant Physician.

One mile from the Central Valley station, on Newburgh Branch of the Erie railroad, 47 miles from New York. Post-office and telegraph, Central Valley. Number of patients limited to 34. Rates on application. Dr. Ferguson may be consulted at 168 Lexington avenue, New York, on Tuesdays and Fridays, from half past eleven to half past twelve.

Long-distance telephone "Central Valley."

RIVER CREST—ASTORIA, LONG ISLAND, NEW YORK CITY

J. Jos. Kindred, M. D., Consulting Physician.

Wm. E. Dold, M. D., Physician in Charge.

Charles W. Gardiner, M. D., Assistant Physician.

Situated on the east bank of the East river, opposite the foot of East One Hundred and Twenty-first street, New York city. Accessible via the Ninety-second street ferry to Astoria, from which it is one and one-half miles over the Shore road. From New York take Lexington avenue cars to Eighty-sixth street;

transfer thence to Astoria ferry. From Brooklyn take the Greenpoint car or Crosstown car to Long Island City, there transferring to the trolley line to the Ninety-second street ferry, Astoria. Patients from New York city and Brooklyn may best be transferred by carriage, as the distance to the foot of East Ninety-second street is only one and one-half miles, and the distance to the city limits of Brooklyn is less than two and a half miles. Telegraph and post-office address, Astoria. Minimum rate, \$15 per week. Number limited to 75.

Long-distance telephone 36, Astoria.

DR. COMBES' SANITARIUM

(Jackson avenue and Flushing Bay, Borough of Queens, New York city; post-office address, Flushing, N. Y.)

R. C. F. Combes, M. D., Physician in Charge.

Wm. F. Moran, M. D., Assistant Physician.

Brooklyn office, 93 Hancock street.

Telephone calls, 139 Flushing and 956 Bedford.

To reach the sanitarium from Manhattan borough take ferry to Long Island City, then New Jackson avenue trolley to the institution (it passes the door). From Brooklyn take trolley to Flushing and then Jackson avenue trolley to the institution. Minimum rate, \$10 per week.

DR. KELLOGG'S HOUSE—RIVERDALE, NEW YORK CITY

Theodore H. Kellogg, M. D., Physician in Charge.

Located on the corner of Riverdale lane and Albany post road, opposite Van Cortlandt Park parade ground, twelve miles from Grand Central station, New York city, and one hour's carriage drive from Central Park via Kingsbridge. Accessible by half-hourly trains to Riverdale station, Hudson River railroad, where a carriage always meets trains, or to Van Cortlandt station, via Putnam railroad, from One Hundred and Fifty-fifth street ele-

vated railroad terminus. To be reached in six minutes by Broadway trolley from Kingsbridge, getting out at Albany post road and Broadway, within a few blocks of the house.

Rates \$75 per week, including trained nurse. Select cases and number limited to seven.

Address letters to Dr. T. H. Kellogg, Riverdale, New York city; telegrams to Riverdale station, Hudson River railroad, and call telephone No. 36, Kingsbridge.

KNICKERBOCKER HALL—COLLEGE POINT, NEW YORK CITY

William E. Sylvester, M. D., Medical Director.

Francis E. Smith, M. D., Associate Physician.

Situated about one mile from stations of Long Island railway, and easily accessible by carriage from any part of Greater New York. May also be reached from either East Thirty-fourth street or East Ninety-ninth street ferries, by trolley direct to the place.

Minimum rate, \$35 per week. Number limited to ten. (Voluntary patients received.)

Telephone, 63 College Point.

DR. BOND'S HOUSE—YONKERS, WESTCHESTER COUNTY

(960 North Broadway)

George F. M. Bond, M. D., Physician in Charge.

Situated on North Broadway, overlooking the Hudson river, one and one-half miles from the New York Central and Hudson River railroad station. Accessible in 30 minutes from New York city, via New York Central and Hudson River railroad trains every half hour from the Grand Central station; in 20 minutes via New York and Putnam railroad from One Hundred and Fifty-fifth street and Eighth avenue, on which trains run every half hour from 8 a. m. to 1 a. m. and every hour

from 1 a. m. to 8 a. m., the latter giving an all night train service; also via Hudson River Day Line boats, and via New York Cab Company's carriages direct to the house. From railroad stations in Yonkers, take Park avenue trolley to Palisade and Roberts avenue, walk west one block to North Broadway, and north on North Broadway, a walk of seven minutes. Upon notification carriages will meet trains day or night.

Number of patients limited to nine, and only selected cases of mental and nervous diseases received. Prices for all services, medical care and treatment, including hydrotherapy, on application.

Local and long-distance telephone, 883 Yonkers.

HILL SIDE OF SENECA—WATKINS, NEW YORK

F. E. Bowlby, M. D., Physician in Charge.

Geo. G. Hill, Manager.

A sanitarium for mental diseases. Accessible from New York city by New York Central railroad, Lehigh Valley to Burdette station and Pennsylvania railroad. Number of patients limited to ten of either sex.

Home is conducted on the "Private Family" plan with home comforts and surroundings. Only selected cases of mental diseases received. Minimum rate for board, medical attendance and private nurse, \$50 per week.

Long-distance telephone and telegraph connected with the house.

REPORTS OF STATE
HOSPITALS

FIFTY-NINTH ANNUAL REPORT
OF THE
MANAGERS
OF THE
UTICA STATE HOSPITAL
AT UTICA
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

OFFICERS OF THE HOSPITAL

MANAGERS

W. STUART WALCOTT, Esq.	New York Mills
GEORGE E. DUNHAM, Esq.	Utica
CHARLES S. SYMONDS, Esq.	Utica
THOMAS F. BAKER, Esq.	Utica
FREDERICK T. PROCTOR, Esq.	Utica
MRS. MARIETTE D. COXE	Utica
MRS. LIZZIE W. CONSTABLE	Utica

TREASURER

HARRY S. PATTEN, Esq.	Utica
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RESIDENT OFFICERS

HAROLD L. PALMER, M. D.	Superintendent and Physician
GEORGE H. TORNEY, JR., M. D.	First Assistant Physician
EDWARD G. STOUT, M. D.	Second Assistant Physician
CLARENCE J. SLOCUM, M. D.	Assistant Physician
JULIUS E. HAIGHT, M. D.	Medical Intern
CLARA SMITH, M. D.	Woman Physician
CHARLES A. MOSHER	Steward
EMMA BARKER	Matron

REPORT OF THE BOARD OF MANAGERS

To the State Commission in Lunacy

Gentlemen.—In accordance with statutory requirement the board of managers of the Utica State Hospital herewith submit their annual report for the fiscal year ending September 30, 1901.

In reviewing the operations of the hospital for the past year, the patients and their welfare come first to mind. A glance at the statistical tables which are appended hereto will show that 301 cases were admitted, 260 discharged; that the total number under treatment was 1,408, and the daily average population 1,128. The recovery rate of 23.92 per cent. on the number admitted is certainly a very satisfactory showing, and one which does credit to the superintendent and his associates. The recovery rate of 6.38 per cent. on the average population does not give an adequate idea of the work which the hospital is doing, because so large a proportion of the patients are chronic cases, some of whom have been here for from ten to thirty years, and who are not reckoned as having the slightest chance of getting well.

The above figures, to one who is familiar with the history of the institution, are suggestive and lead naturally to a comparison with the numbers treated in past years. From the opening of the institution in 1843 until the year 1890 the average population was seldom more than 600. The State care act, which went into effect at about this time, required that provision should be made for the accommodation of a class of patients which had formerly been cared for in the various county institutions. Accordingly there was erected and formally opened in 1892 a building, for 200 patients, known as the infirmary. This raised the capacity of the institution to 800,

but each succeeding year the number requiring care increased until the present population quoted above was reached. Since the construction of the infirmary building no accommodations have been provided, with the exception of the Gracycroft colony, which accommodates forty. A simple computation will therefore show that a considerable amount of overcrowding has taken place in the past ten years. We would therefore submit for your consideration a proposition for the relief of this condition which would at the same time offer facilities for the better treatment of patients with the hope of a greater recovery rate, and make possible also a better classification throughout the whole hospital. This is

A NEW HOSPITAL

building for acute cases. This matter has been discussed many times with the Commission individually and collectively, and we believe that you already look upon the proposition with favor, but there still remains the necessity for action, and we would therefore urge that another year be not allowed to pass by without seeing ground broken for the new building. It is not a matter of theory, but of practical experience, that the better the accommodations and the facilities for the treatment of acute cases the better the chances and the larger the percentage of recovery. An institution of this character should have for its first aim such attention as will bring returned mental balance to those entrusted to its care. It is not so much to look after the chronic cases as to improve the acute cases that is of chief importance. The State in these institutions can render the community no better service than to return to their families those temporarily unbalanced. To do this successfully every possible facility should be afforded. Acute cases, without proper treatment, become chronic. Aside from any other consideration, the State has a purely financial interest in this matter. Manifestly, the cost at, say, even ten dollars per week for six months is less than three dollars per week for a lifetime. The State in its hospitals can save money in no

better way than by preventing as many cases as possible from becoming chronic. The best care for acute cases would be that provided in a special building set aside for their reception and custody. Thus isolated they could be given every possible attention, and thereby the percentage of recoveries would be substantially increased. The first cost of such a structure and the constant cost of its maintenance would be large compared with that part of the building devoted to chronic cases, but it is a simple matter of calculation to show that it would be a very profitable investment to the State, to say nothing of the benefit accorded the community, the families, the friends, and the patients themselves. One need not be an experienced alienist to determine that the likelihood of recovery would be much greater under the conditions and with the surroundings suggested than in the larger hospital, where of necessity the best classification can not be provided, and where the environment may prove a hindrance rather than a help. It is confidently asserted that a properly equipped building of suitable size for the reception and treatment of acute cases would be the best possible investment the State could make in connection with this hospital.

EMPLOYEES' BUILDING

Another matter bearing upon the subject of overcrowding is the accommodation of employees. Many of the hospitals throughout the State have buildings for the accommodation of nurses, attendants and such other employees as it is thought fitting to domicile there. This arrangement is an eminently satisfactory one to the nurse and attendant who has labored the entire day or night, as the case may be, among the patients on the wards. The change of surroundings is not only agreeable and satisfactory, but makes a more efficient and competent employee. At present, of necessity, the nurses and attendants must reside on the wards, where they utilize rooms which might otherwise be put to patients' use. A building for the purposes above mentioned would solve the problem in a very satisfactory manner.

KITCHENS

Not only have sleeping accommodations become inadequate from the steadily increasing number of patients, but dining-room and kitchen capacity as well. We would earnestly call the attention of your honorable board to this latter need. You are already aware of the utter inadequacy of the present rooms—by courtesy called kitchens—located in the basement of the two wings of the main building. They are dark, without ventilation, wet with condensed steam from steam kettles a great deal of the time, in close connection with the main airshafts which are supposed to supply fresh air for the entire building, but which is in fact anything but fresh owing to the constant contamination with kitchen odors. We believe that your honorable body has already condemned these, and we therefore hope that measures will soon be taken to provide a suitable central kitchen with good light and ventilation. We would suggest that the present assembly hall, which is much too small for our present population, be utilized for this purpose and a new assembly hall provided. Its central location in the courtyard, nearly equidistant from the two wings of the main building, is the only logical site that could be selected, and the alterations needed could be carried out without any great outlay of time or money.

PLUMBING

Another item which we would respectfully call to your attention is the necessity for the renewal of the plumbing throughout the building, and the addition of a number of new fixtures. The facilities in this direction have not kept pace with the growth of the population, as is the case with kitchens and dining-rooms. Much of this plumbing has been in place for a great many years and parts of it are unsanitary. Certain additions have been made from time to time, necessitating the opening of pipes and making connections where such connections were never intended to be. The system is overtaxed as a result, and now more additions are needed. Special mention is made regarding

this much needed alteration in the list of needs which is made a part of this report.

CRAGSIDE

For something like four years the hospital has leased a house and seventeen and one-half acres of land adjacent to Graycroft, using the buildings as sleeping quarters for fifteen male patients, with the necessary attendants, all of whom were boarded at the main Graycroft farmhouse. The Cragside building, formerly used as a residence, is in a good state of repair, and the land of fair quality. It has been a very useful adjunct to the farm property and has saved the State annually much more than the sum paid for rental. The experiments (which indeed have passed the experimental stage) in the matter of farm work for patients have been so satisfactory in every sense that it is particularly desirable to enlarge the hospital's property in this respect wherever possible.

While the price at which Cragside can be purchased might seem excessive for farm land, and would be in some other location, it should be borne in mind that this property is very near the city limits, and more desirable and of higher price on that account. Particularly advantageous too is it to us, because it adjoins farm lands the title of which is already in the State. The capacity of the hospital is increased by twenty at a very low rate, and the product of the land would pay interest on the purchase price, which is \$3,500.

GRAYCROFT ADDITION

We beg to call your attention to the need of material enlargement and improvement at the farm colony known as Graycroft. Since the purchase of this property it has proven a most profitable investment. There are housed there thirty male patients with a matron and requisite attendants, and in addition the fifteen who sleep at Cragside are furnished with meals in the Graycroft dining-room. To accommodate thirty men every available inch of space in the present building is utilized for sleeping apartments and a dining-room and kitchen, leaving very

small space indeed which could in any sense be characterized as a sitting-room. In the pleasant and warm weather of summer, when the patients are, during the working hours, engaged on the farm, and in the evening can lounge about the verandas or lawn, no inconvenience is experienced. When, however, rainy weather prevents them both from working and from being out of doors, they are compelled to huddle in the small room available and are decidedly uncomfortable. There might easily be added, and at small expense, a room, say 20 x 30 feet, to be used as a sitting-room for these patients, who are entitled to some special consideration because they more than earn their living at farm work. If this building were to be made two stories in height, like the balance of the structure, additional sleeping room would thus be provided, and would prove very acceptable. The proposed addition, if one story, would cost \$1,500; if two stories, would cost \$1,800.

Speaking of repairs to the Graycroft dwelling-house suggests the fact that it was an old building when originally purchased, and is throughout in need of remodeling and extensive repairs. The work done upon it has been only so much as was absolutely necessary for temporary requirements—nothing like thorough renovation or repair has ever been attempted. The building has answered, and is still answering, its purpose fairly well, but falls far short of what it ought to be. Among the things needed are new floors, new timbers, replastering, repapering, repainting, etc. It is estimated that to put this building in creditable condition would cost \$700.

Whenever requests for funds with which to carry on extraordinary repairs are made in behalf of the Utica State Hospital, and the aggregate of such requests is compared with those of other institutions, it should always be borne in mind that this is the oldest institution of its kind in the State, and that things which are new in other institutions are old and worn in this. There has been great progress in hospital construction and equipment since the Utica buildings were first erected. There is constant need to bring this or that department up to date in

order to supply the conveniences and economies provided for in the plans of newer institutions. A window ever so good when set in its frame shrinks and rattles after extended service, exposed to the weather on the one side and the heat of warm rooms on the other. The floors, sound and substantial when laid, will after many years show wear, and moreover, in a hospital must become so saturated as to make their replacement desirable. Paint and varnish are absolutely essential to neatness and must naturally be used more generously in an old than in a new institution. Increasing requirements demand increasing facilities to meet them. While the stone walls of the Utica State Hospital may stand now as firmly as when first put into place, the interior must of necessity demand constant attention and repair. These things it seems to us your honorable body should take into account in connection with requests for appropriations, some of which are included herewith, and many more of which suggest themselves and might be readily mentioned. The list follows:

NEEDS

Hospital for the acute insane.—A building of this description is very much needed for the reception and treatment of acute cases of insanity. The facilities for treating this class in the present building are inadequate. The wards at present given up to this class of patients are insufficient in size and not properly arranged. Patients cannot be properly classified; noisy and disturbed patients cannot be separated from the depressed and suicidal, and the number of single rooms is limited. It is confidently expected that a greater number of recoveries would result if proper facilities were furnished for the treatment of acute cases. A building for this purpose, with a capacity for 60 patients, would cost. . . . \$33,000

New central kitchen.—Another pressing need of the utmost importance is a new kitchen. The Commission is aware of the location of our present kitchens,

which supply food to the entire population of the main building (nearly a thousand patients, exclusive of attendants and other employees). They are also aware that they have been unqualifiedly condemned. Located in the basement of each wing, there is no opportunity for proper ventilation; they are dark, very small, ill-arranged and wholly inadequate for the service they are required to perform. Furthermore, the main air-shaft of each wing, through which pure air is supposed to circulate for the ventilation of the entire building, passes directly behind each kitchen, separated from it by a thin partition only. Doors and windows open into this air-shaft, and from the north kitchen a passage has been constructed directly through it to reach the dining-room on the opposite side. All food is taken through this passageway, and the door leading into it from the kitchen is constantly open. The result is that various kitchen odors pass directly into the air-shaft and thence to the wards. To correct this state of affairs a new building is needed, which should be placed in the central courtyard and have corridors or conduits running to the present elevators. It has been suggested that the present assembly hall, which is too small for our population, might, with certain alterations be made to serve for this purpose and a building to take the place of it erected elsewhere. This matter has been discussed with the Commissioners and is considered by them quite essential.

Cost. \$10,000

Renewal of plumbing, additions, etc.—One of the most important items which we wish to bring to the Commission's notice is the alteration to the plumbing of the hospital. While our population has steadily increased for the past ten years, little if anything has been done to keep abreast of this increase by adding to the water-closet and lavatory facilities.

The fixtures that were thought necessary in the past for 700 or 800 patients are still made to do duty for about 1,000. The ratio of closets to patients on certain wards is as follows: Ward 1, 1 to 26; ward 3, 1 to 26; ward 6, 1 to 31; ward 7 (the acute service), 1 to 29; ward 11, 1 to 32; ward 12 (disturbed class), 1 to 22; ward 16, 1 to 30; ward 17, 1 to 29; wards 21 and 22 each, 1 to 21; ward 25, 1 to 29. From these data it will be seen that a considerable number of additional closets is required. If the ratio is taken at 1 to 15 or 18, 20 will be needed. There are also several old ones which are unfit for use and should be replaced with new. In the infirmary building, where filthy patients are cared for, there are 12 closets with wooden tops which should be removed and porcelain fixtures substituted. The foul odor from these closets is very obnoxious and a menace to health. When this work is undertaken the lavatories, which in most cases are in close proximity to the water-closets, should receive attention. Set bowls are required in several places where sinks and tin hand basins are doing service at the present time. A very exact estimate as to the amount required cannot be given until the State architect has investigated the work, possibly.....

\$4,000

Building for employees.—At the present time there are lodged in the hospital a large number of attendants, nurses and other employees who take up room which might be otherwise utilized by patients. Last year there were 177 employees lodged in the hospital, and the number has not changed materially. If these persons could be lodged in a building by themselves an equal or greater number of patients could be accommodated, not to mention the satisfaction which would result to the employees themselves of having a place to go off the wards after their work was com-

pleted. It is estimated that a building of this nature would cost	\$50,000
Repairs to wards 21 and 25, women's department.— The main corridors in these wards have hard-wood floors which were laid several years ago. All the rooms, however, are provided with soft-wood floors laid with wide boards which have warped and worn down around knots and where the most wear comes until they are quite irregular. Baseboards are cracked, warped and out of place; the doors are old, as are the windows and frames, and the ceilings and walls need repairs. The expense of this work would be	6,000
Many windows and frames throughout the building are needed. The present ones have been in use many years, and repeated removal and replacement for purposes of cleaning, as well as the general wear and tear of time, has rendered them ill-fitting, noisy when the wind blows, and unable to properly keep out the cold; \$2,500 is asked for this purpose.....	2,500
Page wire fence.—Much of our farm land is without fence, and that around the yards of the piggery is in a dilapidated condition and needs attention immediately. Five hundred dollars is requested for the purchase of Page wire fence, or some other similar kind, and the necessary posts for setting the same	500
Tile floor in the scullery of south kitchen.—Four hundred and twenty square feet of tiling is needed in the south kitchen. The present floor in the scullery and adjacent rooms is composed of flagstones and is very unsanitary, the greasy water leaking between joints and settling in the ashes below, attracting vermin in the shape of water bugs and rats in great numbers. The tile, labor and necessary alterations would cost..	275
Fire hose and chemical engine.—This hospital is prac-	

tically without fire apparatus other than the hose and extinguishers on the wards. There are a couple of cumbersome and heavy hand hose reels and a small sized extinguisher on wheels which have been condemned many times. The main reliance of the hospital in case of fire is placed on the city fire department. With a good-sized chemical engine the hospital employees could probably deal with an incipient fire, before the city department could reach us, which otherwise might result in serious loss without suitable apparatus. Fire hose is also needed for the protection of the buildings at Graycroft. These structures are all of wood. There are several hydrants but no hose; 500 feet are required. For both purposes there is needed..... \$1,500 00

Iron beds.—In the past many of the wooden beds which have been in use for a long period have been replaced by iron ones. There are, however, a considerable number remaining. These are infested with vermin which it is impossible to dislodge. They should be replaced by iron beds..... 300

Crushed stone.—The roads about the hospital need repairs, particularly the road from the rear entrance to the boiler house, over which all the coal and supplies in general are drawn. At certain seasons of the year this road is in a deplorable condition. There is no gravel on the hospital premises that can be used for this purpose, and none within several miles. Crushed stone costs \$1.50 per cubic yard. The road most in need could be repaired for..... 500

The two Corliss engines will require repairs during the coming summer 225

New floor between the engine room and laundry is needed to make this space available..... 250

A new friction clutch and extensive repairs to shafting in engine room will also be needed..... 115

Eight boilers will require new grates..... 1,152

The elevator in the storehouse and the food elevators in the administration building, which carry coal and ice as well, should be connected with the compressed-air system. Two elevators in the main kitchens are now operated in this way and are quite satisfactory.

This work can be done for..... \$500 00

Repairs to cistern under Ward 1 are needed..... 100 00

The following laundry machinery is needed:

No. 2 Shaw collar and cuff shaper..... 29 40

Sharpe's 36-inch collar and cuff ironer..... 380 00

Eclipse seam dampener 8 00

Economic edger 20 00

The above machinery would greatly facilitate the handling of the large amount of work which passes through the laundry each week, as well as save clothing and labor. Our present ironer is small, old-fashioned, has been in use many years, and has not sufficient capacity.

Electric irons.—We at present endeavor to heat our flatirons with gas heaters, of which we have five, but these have been found insufficient to do the work, and besides gas has proved to be expensive. The change from stove to gas was made with the idea of removing the former from the ironing room, as it was considered a source of danger. When it was found that the heaters were inadequate the stove was again brought into use temporarily, as it was thought, but still remains. Thirty electric irons would enable us to do away with both heaters and stove and could be installed for \$200

Painting is required as follows:

East side of women's wards..... 250

East side of men's wards..... 220

Painting cornice around entire building..... 450

Painting tin roofs, Wards 10 and 25..... 140

Painting porch of Wards 19 and 20..... 85

Painting 1,020 windows and frames..... 870

Rewiring telephone system and installing junction boxes.—The telephone cable of the house system is in very bad shape. It is made of double rubber-covered wires, and runs for the most part in the basement. The heat of the stacks has disintegrated the rubber insulation. Junction boxes should also be installed at points where the cable is tapped to run to the telephones. Cost	\$600
Rewiring wards.—Most of the wards were rewired several years ago, but the old wiring still remains in wards 5, 9, 14, 15, 17, 18, 19, 20, 22, 23, 24, 26 and 27. These were wired in the early days of electric lighting, and would not be passed by any board of underwriters. None of the wiring is in conduit, although much of it is sealed work. In some places it runs under the floor, along on the floor timbers without other insulation than the rubber covering. In the attics it is cleated to the floors with wooden cleats. Cost of rewiring would be approximately.....	3,500
Two electroliers are needed in the assembly hall. Cost	60
New boxes are needed on the watchman's clock line.—They are constantly out of order and give much trouble on account of stopping on the contacts and short circuiting the system. New boxes would cost..	50
Moving and raising barn at Graycroft.—To increase the usefulness of two barns at Graycroft, which now stand close together, and not in the same line or on the same level, one should be moved about 20 feet and both brought to a common level. A cement floor should be laid. The estimated cost is.....	400

FINANCES

From the treasurer's report, which is appended hereto, it appears that there has been received from the State treasurer for maintenance, \$175,338; for appropriations, \$14,312.32. The hospital has received from reimbursing patients, \$10,990.14; from private patients, \$11,082.58, and from steward's sales, \$484.14. These amounts, together with receipts from the manufacturing department, clothing manufacturing department, and interest on bank account, make the total receipts, \$275,610.76. The total expenditure amounted to \$264,926.12, leaving a balance October 1, 1901, of \$10,684.64. The annual per capita cost of maintenance, based on the daily average population, is \$156.51, and the weekly per capita cost \$3.01.

THE FARM

It is with a feeling of great satisfaction that we call your attention to the operations of the farm for the past year. Leaving out of consideration the opportunity offered for the employment of a large number of patients in healthful out-door occupation and the satisfaction afforded a few of a home life at the colony at Grayeroft, and viewing the results of the year's work from a financial standpoint solely, we have no hesitation in saying that the ever pertinent question, Does it pay? can surely be answered in the affirmative. For a complete statement of the amount and variety of the products we refer you to the steward's report. We merely make mention here of a few financial facts:

During the year the hospital has used from the farm products amounting to \$25,630.96, this amount being the average market value of the output. Against this amount must be charged for labor, \$2,631.51, maintenance of stock, \$5,675.56, repairs to wagons, sleighs and harness, \$416.49, farm implements and repairs, \$76.62, farm supplies, fertilizers and seed, \$1,787.84, stable maintenance, \$394.08; a total of \$10,982.10, leaving a balance to the credit of the farm of \$14,648.86.

IMPROVEMENTS

The record of the year just closed shows that there have been but few alterations or changes in the hospital plant. The chief addition has been the erection of a new barn at the Graycroft colony for the dairy herd. Since this property was first leased in 1897 part of the herd has been cared for at the colony and part at the hospital. It is now possible to carry on all dairy operations in one place under improved facilities, with greater satisfaction and better results. The barn formerly in use and vacated by this change has been remodeled as far as the basement is concerned and made into a satisfactory vegetable cellar—a very useful addition and one long needed.

The managers desire especially to commend the medical superintendent, Dr. H. L. Palmer, for the faithful and efficient way in which he has administered his trust, and improve this opportunity to make formal record of their appreciation. He has given to the work his entire time and attention, constantly doing all in his power for the welfare of the patients, extending every possible courtesy to their friends, and generally directing the affairs of this great household in a manner evincing excellent executive ability. The assistant physicians have likewise been attentive to their duties and are deserving of special mention. When it is recollected that this institution, with an average population of 1,128, has a staff of only six physicians, including the superintendent, it will be seen at a glance that their positions are in no sense sinecures. Every ward is visited at least twice each day every day in the year by a physician, and every patient is afforded special treatment when the case requires. Moreover, there must be a constant surveillance where something like 200 employees are engaged in carrying on the work of the house. Another and additional service not always appreciated at its real worth is the extensive correspondence which must be carried on between the physicians and the friends of patients and the attention to visiting relatives of inmates naturally solicitous on their behalf. Then, too, accurate daily

records must be kept, entries made in the case books, and a thousand and one details not incident to private practice. The services thus rendered in this hospital are cheerfully commended as being of a high order and thoroughly satisfactory.

MANAGERS' VISITS

The record entered upon the book kept for that purpose shows that during the year covered by this report 145 visits have been made by managers. The figures do not, however, represent the actual number, because frequently the visitor has neglected to make a minute thereof, so that really the total is larger than it appears; but taking the figures as they stand it is evident that members of the board have been at least fairly diligent to and appreciative of their duties. The dates indicate that there has scarcely been a week during the year when the institution and its officers have not been visited by representatives of the board. Under existing statutes the duties of managers are supervisory rather than administrative. The superintendent, the steward, the medical and the other officers have frequently consulted and conferred with managers about matters of importance to the hospital. This is done gratuitously but with faithfulness. Managers visit the wards, the shops and the farm, having a care not only for the welfare of the patients but for the proper maintenance of the State's property. Living within easy reach of the institution they can be speedily called together for conference on any matter of special importance. Friends of patients often find it easier and as satisfactory to call upon managers living in the city, and the several members of the board have endeavored to render such service in response to those requests as would tend to assure the friends and families of inmates that everything possible is being done to insure comfort and recovery. It is only fair to say in this connection that very few, if any, complaints or occasion for criticism have come to the ears of the managers from friends or relatives of patients. It is accepted as a fact that the institution is well conducted, and that its inmates are

intelligently cared for by those in charge. It is believed that the visits of managers to the institution have been of substantial value both to the State and its wards in this hospital for the insane.

No report to your honorable body would be complete without recognizing the faithful service of the attendants and nurses and as well of the heads of the several departments. The administration of Mr. Mosher, the steward, is heartily commended. He has worked indefatigably to serve the interests of the State and this hospital, and in our opinion has succeeded admirably. Engineer Hungerford and his assistants have done good work. The same may be said of the heads of all the other departments, the supervisors and the attendants in charge. Too much credit cannot be given to those men and women whose duty is daily to care for the patients. They find the task arduous, perplexing and always difficult. It requires great self-restraint to fill these positions acceptably. It is gratifying to be able to testify to the efficiency of this service during the year. Too much credit cannot be given the nurses and attendants, and they certainly deserve all they get.

The Lunacy Commission, the superintendents, physicians and managers of the several State hospitals for the insane can never lose sight of the fact that these institutions are hospitals, in no sense penal, whose inmates are entitled to an entirely different and higher grade of care from that commonly afforded by an almshouse. State hospital patients are sick—always sick in mind and sometimes sick in body. Their malady is such that they require constant attention and guardianship day and night. They must be protected against themselves and against each other. They are restrained under continual surveillance, not because of any offense they have committed, but because their ailment requires it. They must not only be housed and fed and clothed, but as well they must be cared for by nurses and attendants trained and skilled in that vocation, and they must have treatment from specialists. The public is too prone to compare the cost of maintenance per patient in State hos-

pitals for the insane with that of maintenance in county almshouses or State prisons. It is undoubtedly true that the insane could be cared for at less per capita in the poorhouses of the several counties than in the State hospitals, but there is a decided difference in the character of the care, and the public spirited, just, not to say generous, people are quite willing that such distinction should be made not only in theory but in practice. Goodness knows there is no extravagance, no wastefulness and no unnecessary expense allowed by your honorable body, nor is any such thing advocated by the managers. The people do not wish to return to the system of almshouse care for the insane even though a few dollars might be saved thereby. It seems to us it might be well if this point could be so emphasized as to be generally appreciated and understood, and that such appreciation and understanding would entirely do away with any disposition which may still be lurking in any corner of the State to reduce the facilities of the State hospitals to a point where the recovery rate might be unfavorably affected. Comfortable quarters, good care, wholesome food and medical attendance are all absolutely essential to the intelligent conduct of State hospitals. The managers of this institution feel that the members of your honorable body are in hearty accord with us on this proposition.

The managers of the Utica State Hospital for the Insane desire formally and in this report to repeat the assertions, previously made in similar documents, of our appreciation of the entirely friendly and cordial relations existing between the managers and the State Commissioners in Lunacy. Yours is the practically absolute as well as central authority. No purchases are made or sums expended without your explicit approval. For certain provisions and commodities under your direction the managers have advertised for proposals, and in every instance have let the contract to the lowest bidder, these contracts having been approved by the Commission before becoming operative. Under existing statutes the powers of managers are limited and their duties at best only advisory.

During the year every possible economy has been practiced, and the aim has been to make the expenditures in all departments as low as is consistent with the service the State should expect to provide. The visits of the managers to the hospital, averaging nearly three a week for the year, have presumably been productive of that good reasonably to be expected from outside supervision and the suggestions naturally incident from such inspection. The managers can say in all truthfulness that they have endeavored conscientiously to discharge their duties as they understand them, always with an eye single to the interests of the State and its unfortunate wards in this institution. In conclusion they feel that they can point with pardonable pride to the maintenance during the year of the good reputation and high standing the Utica hospital has always enjoyed. From superintendent and assistant physicians to the humblest employee, there has been desire and disposition to render intelligent and faithful service. We feel that we can safely say this has been a creditable year in this institution, and we cheerfully commend the superintendent and other executive and associate officers for their devotion to their tasks and the success which has attended their efforts.

All of which is respectfully submitted.

W. STUART WALCOTT
GEORGE E. DUNHAM
CHARLES S. SYMONDS
THOMAS F. BAKER
FREDERICK T. PROCTOR
MARIETTE D. COXE
LIZZIE W. CONSTABLE

September 30, 1901

REPORT OF THE TREASURER

Of the Utica State Hospital for the year ending September
30, 1901

Receipts

1900, October 1. Balance on hand.....	\$5,281 31
Received from State Treasurer for maintenance	\$175,338 00
Received from State Treasurer for appropriations	14,312 32
Received from State Treasurer for manufacturing department	5,000 00
Received from reimbursing patients.	10,990 14
Received from private patients.....	11,082 58
Received from steward's sales.....	484 14
Received from manufacturing de- partment	49,026 62
Received from interest on bank ac- count	559 29
Received from clothing manufactur- ing department	3,536 36
	<hr/> 270,329 45
	<hr/> \$275,610 76

Expenditures

Paid officers' salaries.....	\$13,908 42
Paid wages	60,908 84
Paid provisions and stores.....	53,228 96
Paid ordinary repairs.....	3,350 00
Paid farm and grounds.....	5,315 63
Paid clothing	9,921 89
Paid furniture and bedding.....	4,306 04
Paid books and stationery.....	1,612 99
Paid fuel and light.....	14,473 37

Paid medical supplies.....	\$2,005 02	
Paid miscellaneous expenses.....	5,250 13	
Paid transportation of patients....	2,405 50	
Paid construction	14,312 32	
Paid manufacturing department...	51,110 00	
Paid State Treasurer under chapter 580 of the Laws of 1899.....	22,817 01	
		<hr/>
		\$264,926 12
1901, October 1. Cash in bank.....		10,684 64
		<hr/>
		\$275,610 76
		<hr/> <hr/>

HARRY S. PATTEN

Treasurer

REPORT OF THE SUPERINTENDENT

To the Board of Managers of the Utica State Hospital

Pursuant to statute, I have the honor to submit the fifty-ninth annual report of the superintendent, together with the usual statistical tables.

THE STATISTICS

The following table shows the movement of the population for the year:

	Men	Women	Total
Remaining October 1, 1900.....	549	558	1,107
Admitted during year ending September			
30, 1901	152	149	301
Total under treatment during year.....	701	707	1,408
Daily average population.....	549	579	1,128
Capacity of institution.....	536	597	1,133
<hr/>			
Discharged during the year:			
As recovered.....	36	36	72
As improved.....	27	20	47
As not insane.....	3	0	3
Died	56	39	95
Whole number discharged during the			
year	149	111	260
Remaining October 1, 1901.....	552	596	1,148
<hr/>			

It will be noticed that at the beginning of the fiscal year October 1, 1900, there were in the hospital 1,107 patients; 549 of these were men and 558 women. This number is smaller by 12 than was the case at the beginning of the preceding year. The total number under treatment was 1,408. The greatest number in the hospital on any day was 1,149; the smallest, 1,104; the daily average number, 1,128. The certified capacity of the institution was 1,133 until August, at which time the abandonment of the colony at Dixhurst reduced this number to 1,113.

ADMISSIONS

Of the number admitted, 293 came from their homes on original commitments and 8 were transferred from other institutions, making a total of 301. Of these 152 were men and 149 women. The first admissions numbered 236, and of these 124 were men and 112 women. The number of admissions exceeds that of the previous year by 30, and is entirely due to an increase in the number of women patients.

Intemperance in the use of alcoholic stimulants is again the cause to which the largest number of cases among men is ascribed, namely, 28, while mental strain, worry and overwork are the factors responsible for the greatest number of cases among women, namely, 14.

Sixty-nine single and 65 married men were admitted during the year, and 59 single and 63 married women. As regards age, the largest number of cases occurred in those between 40 and 50, namely, 40 men and 33 women; the next largest in those between 50 and 60, namely, 19 men and 23 women, and the third largest in those between 25 and 30, namely, 20 men and 19 women. Two hundred and twenty-eight cases had a common school education; 27 cases had no education. Two hundred and ninety-six of the cases admitted were public patients and 5 were private.

An inherited predisposition to insanity was found to exist in 116 cases, 48 men and 68 women, which is 38 per cent. of the number admitted. Thirty-one cases showed an hereditary tendency to insanity through the paternal branch, 47 cases through the maternal branch and 2 cases through both branches. One hundred and fifty-five cases showed no hereditary tendency.

The form of acute insanity most prominent was melancholia, there being 75 cases, while of mania there were but 44 cases. Of the chronic forms, there were 51 cases of mania, 45 cases of dementia and 21 cases of melancholia. Eight cases of paranoia and 9 cases of general paralysis were admitted.

Twenty-five cases had been insane less than a month previous to admission and 24 less than three months; the remaining cases from three months to two years.

Seventy-four patients were foreign-born, which is 24.58 per cent. of the total number admitted.

DISCHARGES

There were discharged recovered 36 men and 36 women, a total of 72, which gives a recovery rate of 6.38 per cent. on the average population, 23.92 per cent. on the number admitted, 30.50 per cent. on the number admitted for the first time, 5.11 per cent. on the whole number treated, and 27.69 per cent. on the number discharged.

The following table gives the recovery rate for the past ten years, based on the average population and number admitted:

	Recovered	Average population	Percentage	Admitted	Percentage
1892	87	811	10.72	339	25.66
1893	85	923	9.20	375	22.66
1894	69	978	7.06	352	19.60
1895	94	1,004	9.36	394	23.85
1896	78	1,004	7.76	319	24.45
1897	100	1,014	9.86	225	44.44
1898	79	1,014	7.79	268	29.48
1899	70	1,099	6.37	305	22.98
1900	65	1,112	5.85	271	24.00
1901	72	1,128	6.38	301	23.92

Twenty-seven men and 20 women, a total of 47, were discharged improved; 27 men and 16 women, a total of 43, were discharged unimproved; 3 were not insane, and 56 men and 39 women, a total of 95, died.

The death-rate on the whole number treated is 6.74 and on the average population, 8.42. The death-rate for the past ten years is as follows:

	Deaths	Whole number treated	Percent- age	Average population	Percent- age
1892	80	1,123	7.12	811	9.86
1893	94	1,216	7.73	923	10.18
1894	91	1,326	6.86	978	9.30
1895	98	1,394	7.03	1,004	9.76
1896	85	1,311	6.48	1,004	8.46
1897	70	1,241	5.64	1,014	6.90
1898	62	1,264	4.10	1,014	6.11
1899	91	1,361	6.68	1,099	8.28
1900	90	1,390	6.47	1,112	8.09
1901	95	1,408	6.74	1,128	8.42

TREATMENT OF CASES

The methods of treatment that have prevailed in the hospital for the last few years have continued in force with such adjuncts as have seemed advantageous and have been available. Acute patients have been confined to bed for a period which varied in different cases, the length of time being determined by the amount of improvement in each case, including both mental and physical symptoms; the restless patient has been soothed, the noisy quieted, the feeble in body strengthened; personal hygiene and bodily functions have been regulated and the multitude of erroneous ideas which surge through the patient's mind and account for his erratic actions brought to the waning point and a realization of his environment established. Baths and packs have played an important part in the treatment, and sedatives have been used to a certain extent but as sparingly as possible. Due attention has been paid to auto-intoxication. Diet and intestinal antiseptics, with such other medication as has been found necessary to combat the infection, have been brought into early requisition. Static electricity has been found of use in certain cases.

I regret to say that the design of our buildings does not lend itself kindly to the modern methods of caring for the acute insane, at least in a satisfactory manner, especially when the

wards are overcrowded as has been the case for the past few years. Proper classification under the circumstances is impossible, and although every effort is put forth to arrive at an arrangement as near perfection as may be, it has been found that we are still a long way from the goal. The location of one ward because of its proximity to a disturbed corridor or because it must be used as a thoroughfare precludes its use for acute cases; another is too large for the careful and close observation which these cases deserve, while others are lacking in adequate fittings, proper bathing facilities and single rooms. These conditions, taken into consideration with the large number of chronic patients for whom room must be made and who constantly overflow into the wards we are pleased to consider acute, and as a consequence sadly interfere with any effort at classification, render the treatment of the acute cases difficult, to say the least. There is satisfaction to be found, however, in our recovery rate, which is all the more pronounced because of the difficulties that have had to be surmounted. While not especially high, it has not fallen below that of other years when conditions were somewhat more favorable, and one is led to ask what the result would be under improved conditions and better facilities.

A hospital building designed and fitted for the recovery of acute cases would no doubt give very flattering returns in the increased number of husbands and fathers enabled to resume their former places in the community as self-respecting and self-supporting citizens, of wives and mothers fitted for the duties of the home and family, and of sons and daughters renewed and made ready once more for active effort in their various occupations.

ABANDONMENT OF DIXHURST

As you are aware, the lease of the Dixhurst property expired on August 1st last. The owner refused to extend the lease, although he was willing to sell the property at the price (\$12,000) agreed upon at the time the hospital took possession. This price was considered too high by the Commission, consequently

the colony was discontinued. For the past three years the house has furnished accommodation for twenty women patients, and the barn has provided for the needs of one team and the storage of hay, straw and wagons. There was a piggery and hennery in connection with the property and $19\frac{1}{2}$ acres of land. As this land adjoined our Graycroft property, both were cultivated by the men at Graycroft, and the women at Dixhurst were furnished occupation in sewing and mending and the necessary household duties in both colonies. Land for agricultural purposes in the vicinity of the hospital is limited in amount, and for this reason, if for no other, it is to be regretted that this tract could not be added to our Graycroft farm. The city is fast spreading to the westward, and considerable building has already been done in our immediate neighborhood. The price asked for the property is no doubt high, but there is little hope that it will ever be lower, rather the contrary.

OCCUPATION

It is our endeavor to provide occupation for each patient as soon as his condition will warrant it. The farm and grounds and the industrial departments supply our needs in this direction, and it is rare indeed that we cannot find agreeable employment for the most exacting. The disturbed men patients have been turned into the open fields and under competent supervision and wise direction have accomplished much from a utilitarian standpoint, but especially have they benefitted themselves. Their excess of nervous energy has been given ample opportunity to expend itself in the open air and sunlight with purposive effect instead of finding release through restless pacing to and fro.

Many have found pleasant and agreeable occupation in the printing and binding department and in the knitting department. Especially have women patients been encouraged to engage in these industries which are so largely supplied by women workers in the outside world, and many have become quite expert in handling the various machines and in "picking on,"

while at the same time they have been afforded a change from the tiresome ward routine and a relief from irksome household duties. A number of men patients have been constantly employed in the coffee-roasting plant and storehouse, also with baker, carpenter, machinist, tailor, broom, brush and mat maker, printer, upholsterer, shoemaker, harness maker, ruler and binder, and knitter. Of the colony workers, I make mention with much satisfaction and great praise. They have labored faithfully and well, and their rugged frames and bronzed faces testify to the advantage of a colony life such as they have led at Graycroft.

The percentage of men patients employed daily during the year in some useful occupation is 57.46, and women 46.91.

DIVERSION

For the relief of introspection and depression and other morbid mental symptoms, our aim has been, as in the past, to supply a sufficient amount of amusement of various kinds. The regular weekly dances have been continued during the winter months, likewise sleigh-ride parties in our large four-horse sleigh. Our annual field day sports and Christmas tree exercises passed off with great satisfaction to all concerned. A large number of patients were afforded an opportunity to go to the circus at the time of its annual visit, a privilege which was greatly appreciated. Entertainments have been given by Geo. E. Little, the St. Vincent's cadets, Miss Amy Murray in Scotch songs, concert by employees and patients, musical and dramatic entertainment by employees, stereopticon lecture by Frank Warne, Sawtelle Dramatic Company, concert by Utica Philharmonic Society, recital by Utica Conservatory of Music, "Crawford's Claim" by Utica Dramatic Club, "Aunt Samantha's Album," E. A. Hendrickson, magician; recitations by Myra Holmes, M. De Villiers, magician; Pinkstone Minstrel Troupe, and Mr. McCollin, the blind humorist. A number of the above-mentioned entertainments were gratuitously furnished the hospital by its friends in the city, and I take this opportunity to express my great appreciation for their efforts in behalf of the patients, and return thanks for their kindly interest.

Many newspapers, magazines and other periodicals have been received, and grateful acknowledgment is herewith returned to the givers whose thoughtfulness has afforded our patients many pleasant hours.

Baseball and cricket games have continued, and each has its devotees and interested spectators. The addition to the lawn of a number of portable swings has been greatly appreciated. A new piano has been placed in the men's first ward.

The steam launch on the canal has been utilized for the enjoyment of the women patients especially, whenever an engineer could be spared, but we have been somewhat handicapped in this respect as all our force is kept busy in the management of the plant, and it does not happen that the necessary crew can be spared as often as is desirable.

IMPROVEMENTS

There have been a number of improvements during the year, the most important being the new barn at Graycroft. This was built during the summer and was completed just in time for the harvest; in fact we began to fill it before the carpenters were out of it. Its dimensions are 40x100 feet, with stone basement and gambrel roof. The method of its construction is a little out of the ordinary. Instead of having posts and plates, the uprights are in the form of trusses which spring from the floor on either side and meet at the peak. This gives a very stiff frame, which is guaranteed to withstand any reasonable gale and to be free from any tendency to bulge. It requires no beams and there is consequently a free space from the peak to the floor, which facilitates the use of a carrier of special form which holds its load suspended at any desired height above the floor. The basement provides for 56 cows in two rows facing the sides of the building, with a driveway between from one end to the other. The floor, mangers, standing space, gutters and driveway are of cement, ventilating shafts run from each side to the cupola, and the gutters are piped to a cistern on the outside. Running water is provided and a drinking bucket for

every two cows. Cleanliness and good hygiene were aimed at in the construction, in order that our dairy cows might be free from all disease, especially tuberculosis. At each end of the barn is a round silo capable of holding 150 tons of ensilage. They are built of wood, an inner and outer layer with air space between, the lining being of cypress, which resists the acid of the ensilage and does not decay as rapidly as other material. At a short distance from the barn a milk house has been built and water piped to it, and here the milk is taken and cooled before it has had opportunity to become contaminated by stable odors.

The erection of this barn has led to several changes in our arrangements. Heretofore the larger part of the dairy herd has been kept at the hospital and the facilities for obtaining the best results have been far from adequate. With the completion of the barn all the cattle were transferred to Graycroft and joined with the other herd so that hereafter all our dairy operations will be carried on at the colony with, I trust, much better results than we have been able to obtain in the past. The old barn which is vacated by this arrangement will be made to serve as a vegetable cellar and for storage of wagons, hay and straw. In the past, for lack of a better place, we have been compelled to store all vegetables in the basements, which resulted in considerable loss owing to the presence of numerous steampipes which rendered the place too warm. The additional room for wagons will also be very acceptable, as there has been no place where they could be suitably housed before. Many of them have been stored heretofore in the old boat-house on the canal at a considerable distance from the hospital. You are well aware of its dilapidated condition, and can well imagine how one season's storage there would result in more damage to the vehicles than three years' use.

Among other improvements should be mentioned the alterations to the piggyery. This structure and its occupants, although necessary appurtenances to the economic management of an institution, have been the source of much tribulation in the past.

Disease has been rampant each year to a greater or less extent and the death-rate among the animals has been high. The old plank flooring, which was badly decayed and no doubt infected with the specific germ of the disease from which the swine suffered and died, has been torn up and removed. In its place a cement floor has been laid and troughs made of the same, the object being to eliminate wood and other absorbent material from the building as much as possible. Gutters with pipes leading to an outside reservoir, and water pipes with iron drinking basins for each pen have been installed. With these improvements we hope to be free from disease.

VACCINATION

In January the entire population was vaccinated owing to the prevailing epidemic and numerous cases which appeared in the immediate vicinity. The result was eminently satisfactory, fully 95 per cent. of the cases proving successful.

TRAINING SCHOOL

Under the instruction of the staff the usual course of lectures and demonstrations has been given the attendants. The greatest good results from actual experience in caring for patients on the wards and the instruction there given. Lectures and recitations, however, have their place in the school and have been faithfully given with gratifying results.

GOVERNOR'S VISIT

On July 18th, Governor Odell and party, including several members of the Legislature, visited the institution and inspected the various wards and other parts of the hospital. The Governor expressed himself as well pleased with what he saw.

ACKNOWLEDGMENT

I cannot close the record of the year without making grateful acknowledgment to your board for the kindly interest you have taken in the affairs of the hospital, for the numerous visits you have made and the time you have spent in looking to the welfare of the unfortunates here confined, and especially for the counsel, advice and encouragement which it has been my good fortune to receive at your hands, unsparingly on all occasions. The perplexities and difficulties which have arisen have found solution through your aid, and the many burdens have been made lighter through your assistance. My obligation to you has increased many fold, so many in fact that my sense of gratitude is quite inadequate to offset the debt.

September 30, 1901

H. L. PALMER

Superintendent

STEWARD'S DEPARTMENT

The steward makes the following report, pertaining to the farm:

STOCK

Bulls	2
Calves	3
Cows	72
Heifers	11
Horses	21
Swine	260
Turkeys	35
Chickens	325
Ducks	78
Colts	2

FARM AND GARDEN PRODUCTS

Veal, pounds.....	7,136
Pork, pounds	28,626
Chickens	193
Milk, quarts	192,140
Eggs, dozens.....	1,184
Potatoes, bushels	3,200
Basil, bunches	170
Lima beans, bushels.....	15
String beans, bushels.....	382
Beets, bushels	297
Beets, bunches.....	12,273
Carrots, pounds	9,945
Cabbage, heads.....	53,294
Cauliflower, heads.....	1,038
Green corn, dozens.....	5,227
Celery, heads.....	31,633
Dill, bunches	170
Egg plant.....	116

Lettuce, heads.....	43,300
Leek, bunches	793
Mint, bunches	32
Muskmelons	5,943
Watermelons	289
Okra	3,325
Onions, bushels.....	951
Onions, bunches.....	18,902
Parsley, bunches.....	1,566
Peppers	264
Parsnips, pounds.....	8,032
Pumpkins, pounds.....	1,745
Radishes, bunches.....	30,019
Rhubarb, bunches.....	32,689
Squash, pounds.....	11,824
Spinach, bushels.....	1,122
Summer savory, bunches.....	96
Tomatoes, bushels.....	1,025
Turnips, pounds.....	8,568
Horseradish, bushels	104
Kohlrabi	1,844
Salsify, bunches	2,867
Asparagus, bunches	954
Green peas, bushels	225
Cucumbers	125,827
Apples, bushels	80
Grapes, pounds	864
Raspberries, quarts	1,106
Strawberries, quarts	3,248
Ducks	60
Turkeys, pounds	15
Carrots, horse, bushels	900
Oats, bushels	816
Field corn, bushels	715
Ensilage, tons	500

Corn fodder, tons	40
Straw, tons	56
Hay, tons	150

The tailor reports the number of pieces made and repaired during the year as 11,644.

The upholsterer reports the number of pieces made and repaired during the year as 4,786.

The shoemaker reports the number of pieces made and repaired during the year as 1,727.

The knitter reports the number of pieces made and repaired during the year as 2,311 dozens.

MATRON'S DEPARTMENT

The matron reports the following number of articles made and mended in the house during the year:

Aprons	1,519
Blankets, quilted	4
Bibs	99
Clothes bags	21
Curtains, long	25
Curtains, sash	50
Covers for laundry bars	25
Cloths for bed tables.....	104
Cloths for covering meat	6
Caps for kitchen	6
Caps for nurses	417
Chemises	477
Drawers	529
Dresses	950
Feeding gowns	2
Holdes	17
Handkerchiefs	562
Napkins	42
Nightdresses	182
Pillow cases	1,527
Sheets	1,428
Shirts	621
Skirts	128
Suspenders	96
Spreads, cupboard	102
Spreads, bureau	34
Spreads, stand, plain.....	34
Spreads, stand, hemstitched	110
Screens, covered	9
Sofa cushions	48

STATE COMMISSION IN LUNACY

491

Strainers for coffee	12
Tray cloths	205
Tablecloths	591
Ticks, straw	66
Towels	3,717
Underwaists, canton flannel.....	27

Number of articles made.....	13,792
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Number of articles mended.....	68,992
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STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900	549	558	1,107
Admitted during year ending Sept. 30, 1901:			
On original commitments:			
From residences	150	143	293
By transfers from other institutions for insane.	2	6	8
Total number under treatment during year.	701	707	1,408
Daily average population	549	579	1,128
Capacity of institution	536	597	1,133
Discharged during the year:			
As recovered	36	36	72
As improved	27	20	47
As unimproved	27	16	43
As not insane*	3	.....	3
Died	56	39	95
Whole number discharged during the year	149	111	260
Remaining October 1, 1901	552	596	1,148

* Of the three patients discharged "not insane" two were suffering from alcoholism and one was a morphine habitué.

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	Jan. 16, 1843
Total acreage of grounds and buildings	438
Value of real estate, including buildings	\$1,085,000 00
Value of personal property	95,000 00
Acreage under cultivation	325
Balance on hand October 1, 1900, overdrawn	<u>\$243 32</u>

Receipts during year, maintenance fund:

From State Treasury for maintenance on estimates	
1 to 12 inclusive	\$175,338 00
From private patients	11,082 58
From reimbursing patients	10,990 14
From all other sources	5,080 35
Total receipts for maintenance	<u>\$202,491 07</u>

Total receipts from State Commission in Lunacy for extraordinary improvements	<u>\$14,312 32</u>
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Balance on hand Oct. 1, 1900, manufacturing fund	<u>\$5,024 07</u>
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Total receipts from manufacturing fund	<u>\$49,026 62</u>
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Total receipts for manufacturing fund from Comptroller	<u>\$5,000 00</u>
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Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries	\$13,908 42
Estimate No. 2. For wages	60,908 84
Estimate No. 3. For provisions and stores	53,228 96
Estimate No. 4. For ordinary repairs	3,350 00
Estimate No. 5. For farm and grounds	5,315 63
Estimate No. 6. For clothing	9,921 89
Estimate No. 7. For furniture and bedding	4,306 04
Estimate No. 8. For books and stationery	1,612 99
Estimate No. 9. For fuel and light	14,473 37
Estimate No. 10. For medical supplies	2,005 02
Estimate No. 11. For miscellaneous expenses	5,250 13
Estimate No. 12. For transportation	2,405 50

Total disbursements, estimates 1 to 12 inclusive	<u>\$176,686 79</u>
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Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionment by State Commission in Lunacy.....	\$14,312 32
<hr/>	
Total disbursements during year, manufacturing fund	\$51,110 00
<hr/>	
Remitted to State Treasurer, sundry receipts, Chap. 580, Laws 1899.....	\$22,817 01
<hr/>	
Balances October 1, 1901:	
General maintenance fund.....	\$2,743 95
Manufacturing fund	7,940 69
<hr/>	
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive.....	\$3 01
Maximum rate of wages paid attendants:	
Men	\$24 per month
Women	18 per month
Minimum rate of wages paid attendants:	
Men.....	20 per month
Women	14 per month
Proportion of day attendants to average daily population	1 to 10.54
Proportion of night attendants to average daily population.....	1 to 53.76
Percentage of daily patient population engaged in some kind of useful occupation.....	52.18
Estimated value of farm and garden products during year	\$25,630 96
Estimated value of articles made or manufactured by patients during year	10,000 00
<hr/>	

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION		
	Men	Women	Total	Men	Women	Total
Moral:						
Adverse conditions (such as loss of friends, business troubles, etc.)	10	3	13	3	1	4
Mental strain, worry and overwork (not included in above)	6	14	20	1	5	6
Religious excitement .....	.....	2	2	.....	.....	.....
Love affairs (including seduction)	1	1	2	.....	.....	.....
Fright and nervous shock...	2	2	4	.....	1	1
Physical:						
Intemperance	28	3	31	5	.....	5
Sexual excess	1	.....	1	.....	.....	.....
Venereal diseases	1	2	3	1	.....	1
Masturbation	4	.....	4	3	.....	3
Accident or injury	2	1	3	.....	.....	.....
Pregnancy .....	.....	2	2	.....	1	1
Parturition and puerperium .....	.....	8	8	.....	2	2
Change of life .....	.....	12	12	.....	7	7
Fevers	1	2	3	.....	.....	.....
Privation and overwork	1	.....	1	.....	.....	.....
Epilepsy	11	2	13	4	.....	4
Other convulsive disorders ..	.....	1	1	.....	1	1
Diseases of skull and brain..	5	1	6	2	1	3
Old age	14	11	25	2	1	3
Abuse of drugs	2	.....	2	1	.....	1
All other bodily disorders and ill health	17	6	23	10	4	14
Heredity	6	32	38	6	32	38
Congenital defect	7	2	9	3	.....	3
Unascertained	30	42	72	7	12	19
Not insane	3	.....	3	.....	.....	.....
Total	152	149	301	48	68	116

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious.....	.....	.....	.....	2	.....	2
Mania, acute.....	44	32	6	989	465	104
Mania, recurrent.....	11	.....	1	79	39	4
Mania, chronic.....	51	.....	7	416	5	89
Melancholia, acute.....	75	36	11	1,298	580	132
Melancholia, simple.....	5	4	.....	59	43	6
Melancholia, chronic.....	21	.....	3	275	18	102
Alternating (circular) insanity ..	.....	.....	.....	14	3	3
Paranoia.....	8	.....	.....	30	.....	.....
General paralysis.....	9	.....	16	203	.....	219
Dementia, primary.....	.....	.....	1	25	12	3
Dementia, terminal.....	45	.....	44	824	.....	384
Epilepsy with insanity.....	15	.....	5	179	3	59
Imbecility with maniacal attacks.	14	.....	1	63	.....	6
Idiocy.....	.....	.....	.....	1	.....	.....
Not insane*.....	3	.....	.....	99	.....	2
Not ascertained.....	.....	.....	.....	37	.....	.....
Total.....	301	72	95	4,593	1,168	1,115

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 5

Temporarily discontinued.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	16	9	25	.....	.....	.....	232	189	421	8	6	14
One to three months	11	13	24	12	6	18	134	175	309	137	95	232
Three to six months	5	6	11	12	12	24	61	80	141	211	167	378
Six to nine months	2	2	4	6	9	15	42	37	79	110	126	236
Nine months to one year	2	4	6	2	5	7	21	16	37	42	63	105
One year to eighteen months ..	.....	.....	.....	2	1	3	25	22	47	51	62	113
Eighteen months to two years ..	.....	2	2	1	1	2	6	2	8	7	15	22
Two to three years .....	.....	.....	.....	1	.....	1	9	11	20	23	15	38
Three to four years .....	.....	.....	.....	.....	.....	.....	5	3	8	11	5	16
Four to five years .....	.....	.....	.....	.....	.....	.....	5	2	7	2	2	4
Five to ten years .....	.....	.....	.....	.....	2	2	8	1	9	3	6	9
Ten to twenty years .....	.....	.....	.....	.....	.....	.....	3	.....	3	1	.....	1
Unascertained .....	.....	.....	.....	.....	.....	.....	55	24	79	.....	.....	.....
Total	36	36	72	36	36	72	606	562	1,168	606	562	1,168

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases :						
Influenza		1	1	.....	2	2
Diphtheria .....				.....	1	1
Erysipelas	1	.....	1	6	7	13
Septicemia and pyemia .....	.....	.....	.....	6	3	9
Dysentery .....	.....	.....	.....	3	2	5
Syphilis	1	.....	1	1	2	3
Tuberculosis	4	10	14	51	72	123
Constitutional diseases :						
Diabetes mellitus and dia- betes insipidus .....	.....	.....	.....	.....	1	1
Diseases of the digestive system :						
Diseases of the stomach .....	.....	.....	.....	3	2	5
Diseases of the intestines ..	7	4	11	35	36	71
Diseases of the liver	2	.....	2	4	.....	4
Diseases of the peritoneum ..	.....	1	1	8	4	12
Diseases of the respiratory sys- tem :						
Diseases of the nose and larynx .....	.....	.....	.....	1	.....	1
Diseases of the bronchi .....	.....	.....	.....	1	.....	1
Diseases of the lungs	9	4	13	50	42	92
Diseases of the pleura .....	.....	.....	.....	1	2	3
Diseases of the circulatory sys- tem :						
Diseases of the pericardium ..	.....	.....	.....	1	1	2
Diseases of the heart	3	6	9	32	77	109
Arterio-sclerosis .....	.....	.....	.....	5	.....	5
Aneurism .....	.....	.....	.....	1	1	2
Diseases of the blood and ductless glands :						
Anemia, pernicious anemia and leukemia .....	.....	.....	.....	1	.....	1
Diseases of the genito-uri- nary system	4	3	7	20	40	60
Diseases of the nervous system :						
Diseases of the spinal cord ..	.....	.....	.....	2	2	4
Diseases of the meninges	1	.....	1	18	2	20
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions) ..	5	4	9	43	30	73
Epilepsy	1	.....	1	9	8	17

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Mental diseases :						
Exhaustion of acute men- tal disease	2	1	3	58	25	83
Exhaustion of chronic mental disease.....						
General paralysis of the insane	12	3	15	173	38	211
The intoxications; heat stroke; obesity :						
Alcoholism				1	.....	1
Metallic poisoning				1	.....	1
Debility of old age		1	1	92	30	122
Accident	2	.....	2	4	.....	4
Suicide				11	4	15
Surgical and gynecological dis- eases and diseases of the skin				10	11	21
Malignant new growths or can- cer	2	1	3	4	13	17
Unknown .....				.....	1	1
Total	56	39	95	656	459	1,115

TABLE No. 8

Showing Hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPT. 30, 1901			SINCE OCT. 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	15	16	31	200	222	422
Maternal branch	22	25	47	214	240	454
Paternal and maternal branches.....	1	1	2	62	61	123
Collateral branches	10	26	36	181	178	359
No hereditary tendency ..	80	75	155	718	611	1,329
Unascertained.....	21	6	27	1,044	761	1,805
Not insane.....	3	.....	3	84	17	101
Total	152	149	301	2,503	2,090	4,593

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	69	59	128	1,156	757	1,913
Married	65	63	128	1,085	897	1,982
Widowed.....	11	26	37	191	387	578
Divorced	5	1	6	15	14	29
Unascertained	2	.....	2	56	35	91
Total	152	149	301	2,503	2,090	4,593

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	6	.....	6	47	2	49
Academic	5	17	22	98	176	274
Common school	129	99	228	1,671	1,412	3,083
Read and write	1	2	3	212	124	336
Read only	2	8	10	106	83	189
No education	5	22	27	191	175	366
Unascertained	4	1	5	178	118	296
Total	152	149	301	2,503	2,090	4,593

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	6	4	10	11	5	16	99	51	150	91	55	146
One to three months	3	4	7	6	3	9	94	65	159	76	56	132
Three to six months	6	4	10	4	2	6	66	47	113	76	37	113
Six to nine months	4	7	11	3	2	5	37	40	77	56	28	84
Nine months to one year	1	.....	1	3	1	4	26	27	53	34	30	64
One year to eighteen months	7	3	10	5	3	8	49	26	75	83	42	125
Eighteen months to two years .....	.....	.....	.....	2	8	10	19	13	32	35	38	73
Two to three years	4	2	6	4	.....	4	48	27	75	66	42	108
Three to four years	4	1	5	1	1	2	33	16	49	38	33	71
Four to six years	3	4	7	3	5	8	26	25	51	46	55	81
Six to ten years	3	3	6	10	6	16	27	22	49	34	45	79
Ten to twenty years	7	2	9	2	3	5	30	30	60	11	15	26
Twenty years and over	4	1	5	2	.....	2	17	16	33	10	3	13
Not insane* .....	.....	.....	.....	.....	.....	.....	1	1	2	.....	.....	.....
Unascertained	4	4	8	.....	.....	.....	84	53	137	.....	.....	.....
Total	56	39	95	56	39	95	656	459	1,115	656	459	1,115
Average duration of insane life (giving years and tenths)				4.2	3.2	3.7				4.3	3.9	4.1

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years.....				1	.....	1
From 10 to 15 years.....				3	4	7
From 15 to 20 years.....	11	8	19	88	74	162
From 20 to 25 years.....	10	14	24	187	145	332
From 25 to 30 years.....	20	19	39	248	214	462
From 30 to 35 years.....	15	13	28	320	245	565
From 35 to 40 years.....	13	18	31	345	232	577
From 40 to 50 years.....	40	33	73	548	466	1,014
From 50 to 60 years.....	19	23	42	345	328	673
From 60 to 70 years.....	13	9	22	258	225	483
From 70 to 80 years.....	8	11	19	125	116	241
From 80 to 90 years.....	3	1	4	35	41	76
Total	152	149	301	2,503	2,090	4,593

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years.....	7	1	8	30	40	70
From 20 to 30 years.....	9	10	19	146	158	304
From 30 to 40 years.....	9	10	19	162	150	312
From 40 to 50 years.....	6	10	16	139	112	251
From 50 to 60 years.....	1	5	6	69	66	135
From 60 to 70 years.....	3	.....	3	49	26	75
From 70 to 80 years.....	1	.....	1	11	10	21
Total	36	36	72	606	562	1,168

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years.....	.....	.....	.....	4	3	7
From 20 to 25 years.....	3	.....	3	24	9	33
From 25 to 30 years.....	2	3	5	18	18	36
From 30 to 35 years.....	3	6	9	50	22	72
From 35 to 40 years.....	5	3	8	66	40	106
From 40 to 50 years.....	17	8	25	151	74	225
From 50 to 60 years.....	9	5	14	119	93	212
From 60 to 70 years.....	5	3	8	112	80	192
From 70 to 80 years.....	9	7	16	77	79	156
From 80 to 90 years.....	3	4	7	35	41	76
Total	56	39	95	656	459	1,115

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month	35	30	65
One to three months	32	18	50
Three to six months	21	17	38
Six to nine months	11	13	24
Nine months to one year	4	2	6
One year to eighteen months	10	7	17
Eighteen months to two years	3	2	5
Two to three years	10	13	23
Three to four years .... ..	.....	8	8
Four to five years	2	7	9
Five to ten years	7	15	22
Ten to fifteen years	6	7	13
Fifteen to twenty years	1	.....	1
Twenty to thirty years	2	4	6
Thirty years and upwards	2	3	5
Not insane*	3	.....	3
Unascertained	3	3	6
Total	152	149	301

*Includes cases of alcoholism, morphia habit, etc.

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	13	14	27
One to three months	26	25	51
Three to six months	23	23	46
Six to nine months	16	22	38
Nine months to one year ...	17	22	39
One year to eighteen months	31	31	62
Eighteen months to two years	33	25	58
Two to three years	55	45	100
Three to four years	57	37	94
Four to five years	26	29	55
Five to ten years	184	204	388
Ten to fifteen years	57	89	146
Fifteen to twenty years	6	14	20
Twenty to thirty years	6	9	15
Thirty years and upwards ..	2	7	9
Total	552	596	1,148

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.....	6	.....	6	66	3	69
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.....	15	.....	15	285	.....	285
Agricultural and pastoral:						
Farmers, gardeners, herdsmen, etc.....	30	.....	30	523	.....	523
Mechanics at out-door vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....	21	.....	21	410	.....	410
Mechanics, etc., at sedentary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	28	.....	28	368	1	369
Domestic service:						
Waiters, cooks, servants, etc.....	1	19	20	31	519	550
Educational and higher domestic duties:						
Governesses, teachers, students, housekeepers, nurses, etc.....	.....	75	75	16	1,037	1,053

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Commercial:						
Shopkeepers, saleswomen, stenographers, typewrit- ers, etc.....		1	1	.....	26	26
Employed in seden- tary occupations:						
Tailoresses, seamstresses, bookbinders, factory workers, etc.....		19	19	1	215	216
Miners, seamen, etc.....	1	.....	1	13	.....	13
Prostitutes					9	9
Laborers	42	.....	42	597	.....	597
No occupation.....	7	35	42	152	254	406
Unascertained.....	1	.....	1	41	26	67
Total.....	152	149	301	2,503	2,090	4,593

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1891			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Connecticut	1	1	2	13	5	18
Delaware	1	.....	1	1	.....	1
Georgia .....	.....	.....	.....	.....	1	1
Illinois .....	.....	.....	.....	.....	5	5
Iowa	1	.....	1	3	.....	3
Kansas .....	.....	.....	.....	1	.....	1
Kentucky .....	.....	.....	.....	2	.....	2
Louisiana .....	.....	.....	.....	1	.....	1
Maine .....	.....	.....	.....	2	1	3
Maryland .....	.....	.....	.....	7	11	18
Massachusetts	1	2	3	14	10	24
Michigan .....	.....	.....	.....	2	1	3
Missouri .....	.....	.....	.....	2	3	5
Nebraska .....	.....	.....	.....	2	.....	2
Nevada	1	.....	1	1	.....	1
New Hampshire .....	.....	.....	.....	3	4	7
New Jersey .....	.....	1	1	5	8	13
New York	102	109	211	1,569	1,285	2,854
North Carolina .....	.....	.....	.....	.....	1	1
Ohio .....	.....	.....	.....	4	3	7
Pennsylvania	1	.....	1	11	12	23
Rhode Island .....	.....	.....	.....	5	1	6
South Carolina	1	.....	1	2	.....	2
Tennessee .....	.....	.....	.....	.....	1	1
Vermont .....	.....	1	1	18	11	29
Virginia .....	.....	.....	.....	4	.....	4
West Virginia .....	.....	.....	.....	1	.....	1
Wisconsin .....	.....	.....	.....	2	4	6
United States	1	1	2	48	28	76
Austria	1	.....	1	6	3	9
Bohemia .....	.....	.....	.....	4	.....	4
Canada	2	1	3	47	36	83
Denmark .....	.....	1	1	7	4	11
England	4	7	11	83	60	143
France .....	.....	.....	.....	7	6	13
Germany	9	8	17	176	152	328
Holland .....	.....	.....	.....	2	3	5
Hungary	1	.....	1	5	.....	5
Ireland	13	13	26	246	296	542
Italy	2	.....	2	15	10	25

Table No. 18—(Concluded)

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
New Brunswick				1		1
Norway	1		1	2		2
Poland	2	2	4	14	14	28
Roumania				1		1
Russia	2		2	13	1	14
Scotland		1	1	12	10	22
Sweden	1		1	2	4	6
Switzerland	1	1	2	12	8	20
Wales	1		1	32	21	53
Unascertained	2		2	93	67	160
Total	152	149	301	2,503	2,090	4,593

Of the total number admitted since the 1st of October, 1888, the parents of 44.49 per cent were both of foreign birth.

In 8.70 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 2.32 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany	1	.....	1
Allegany .....	.....	.....	.....
Broome .....	.....	.....	.....
Cattaraugus .....	.....	.....	.....
Cayuga .....	.....	.....	.....
Chautauqua .....	.....	.....	.....
Chemung .....	.....	.....	.....
Chenango .....	.....	.....	.....
Clinton .....	.....	.....	.....
Columbia .....	.....	.....	.....
Cortland	1	.....	1
Delaware .....	.....	.....	.....
Dutchess	1	.....	1
Erie .....	.....	.....	.....
Essex .....	.....	.....	.....
Fulton	31	.....	31
Genesee .....	.....	.....	.....
Greene .....	.....	.....	.....
Hamilton	1	1	2
Herkimer	47	2	49
Jefferson .....	.....	.....	.....
Kings .....	.....	.....	.....
Lewis .....	.....	.....	.....
Livingston .....	.....	.....	.....
Madison .....	.....	1	1
Monroe .....	.....	.....	.....
Montgomery	37	.....	37
Nassau .....	.....	.....	.....
New York .....	.....	.....	.....
Niagara .....	.....	.....	.....
Oneida	99	.....	99
Onondaga	1	.....	1
Ontario .....	.....	.....	.....
Orange .....	.....	.....	.....
Orleans .....	.....	.....	.....
Oswego .....	.....	.....	.....
Otsego .....	.....	.....	.....
Putnam .....	.....	.....	.....
Queens .....	.....	.....	.....
Rensselaer	1	.....	1
Richmond .....	.....	.....	.....
Rockland .....	.....	.....	.....
St Lawrence .....	.....	.....	.....
Saratoga	30	.....	30

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
Schenectady	26	.....	26
Schoharie	1	.....	1
Schuyler .....	.....	.....	.....
Seneca .....	.....	.....	.....
Steuben .....	.....	.....	.....
Suffolk .....	.....	.....	.....
Sullivan .....	.....	.....	.....
Tioga .....	.....	.....	.....
Tompkins .....	.....	.....	.....
Ulster .....	.....	.....	.....
Warren	19	.....	19
Washington .....	.....	.....	.....
Wayne .....	.....	.....	.....
Westchester .....	.....	1	1
Wyoming .....	.....	.....	.....
Yates .....	.....	.....	.....
Soldiers' Home .....	.....	.....	.....
Total	296	5	301

TABLE No. 20

Showing the residence by counties and classification of patients remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany	38	50	88	1	1	2
Allegany						
Broome					1	1
Cattaraugus						
Cayuga	2		2		1	1
Chautauqua						
Chemung		3	3		1	1
Chenango						
Clinton	1		1			
Columbia						
Cortland		1	1			
Delaware						
Dutchess	2	1	3			
Erie				1		1
Essex						
Franklin						
Fulton	35	39	74		1	1
Genesee						
Greene	1		1			
Hamilton	3	1	4	1		1
Herkimer	31	66	97	1	2	3
Jefferson	1	1	2		2	2
Kings				1		1
Lewis						
Livingston						
Madison	18	19	37		2	2
Monroe	1		1		1	1
Montgomery	48	56	104		1	1
New York	34	9	43	1		1
Niagara						
Oneida	202	202	404	4	5	9
Onondaga	1	7	8	1		1
Ontario						
Orange						
Orleans						
Oswego		1	1			
Otsego		2	2			
Putnam						
Queens	1		1			
Rensselaer	14	1	15		1	1
Richmond				1		1

Table No. 20—(Concluded)

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Rockland						
St Lawrence					1	1
Saratoga	34	61	95			
Schenectady	47	27	74		1	1
Schoharie	1	2	3			
Schuyler						
Seneca						
Steuben						
Suffolk						
Sullivan						
Tioga						
Tompkins					1	1
Ulster						
Warren	13	19	32			
Washington	10	4	14			
Wayne						
Westchester		1	1	1	1	2
Wyoming	1		1			
Yates						
Unascertained						
Total	539	573	1,112	13	23	36

THIRTY-THIRD ANNUAL REPORT
OF THE
BOARD OF MANAGERS
OF THE
WILLARD STATE HOSPITAL
TO THE
State Commission in Lunacy
FOR THE YEAR 1901

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WILLIAM J. POLLARD	Seneca Falls
JOHN H. OSBORNE.....	Auburn
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REPORT OF THE BOARD OF MANAGERS

To the State Commission in Lunacy

The managers of the Willard State Hospital have the honor to submit the thirty-third annual report of this institution for the year ending September 30, 1901, together with the reports of the superintendent and the treasurer for the same period of time.

Respectfully submitted.

S. H. HAMMOND

President of the Board of Managers

REPORT OF THE MEDICAL SUPERINTENDENT

Hon. S. H. HAMMOND, *President of the Board of Managers, etc.,
Geneva, N. Y.*

Dear Sir.—Herewith I enclose to you for presentation to the board of managers of the Willard State Hospital the usual annual report of this institution for the year ending September 30, 1901. Statistical tables, reports of the treasurer, steward, etc., will be found appended.

The following is the usual table showing the movement of population during the past year:

	Men	Women	Total
Remaining October 1, 1900.....	1,122	1,144	2,266
Admitted during the year.....	155	122	277
Total number treated during year.....	1,277	1,266	2,543
Average daily population.....	1,119	1,137	2,256
Discharged during the year.....	147	160	307
	=====	=====	=====

The patients discharged were divided as follows:

	Men	Women	Total
Discharged recovered	27	27	54
Discharged improved	21	36	57
Discharged unimproved	15	7	22
Discharged not insane.....	1	.....	1
Died	83	90	173
Remaining October 1, 1901.....	1,130	1,106	2,236
	=====	=====	=====

This table shows that there was a noted decrease of 30 people in the hospital population during the past year, brought about in this way: There was an increase of 8 men and a decrease of 38 women. The largest number under treatment on any one day was on December 3d, when the population was 2,284, and the smallest census was on September 27th, when the population was 2,237. Of the patients admitted during the year, 226

were brought direct from their homes, 15 were admitted from almshouses, 3 from city hospitals, 12 from jails, 14 were transferred from other New York State hospitals, and 7 were received from the Soldiers' Home. All of the patients admitted were public patients, and 11.5 per cent. of the whole number admitted were over 70, and of these 5 were over 80. The largest number admitted as to age were between the years of 40 and 50, and the second largest number were between the years of 50 and 60.

The percentage of recoveries, calculated on the average daily population, was 2.3 per cent. If calculated on the number of admissions, this percentage would be 19.6 per cent. Of the 134 patients discharged, 19 were transferred to other hospitals in this State; 45 were discharged at the expiration of their paroles; 65 went direct to their homes, and there were 5 elopements. Of the 5 who eloped, 2 were found after their discharge to be with their friends, 1 was afterwards recommitted to the hospital, and 2 have not been recovered, although there was no reason to think but what they had managed to get along outside, or were taken care of by their friends. One of these patients wrote letters to us from a western State, but as we believed that he really belonged in that State, though we had been unable to prove his residence, we felt that he would be probably taken care of by the authorities of the place where he was likely to stay, and that his case was such that it would easily draw attention to him and thus prevent the likelihood of his committing any overt act or having a chance to do anything very much out of the way.

The death-rate for the year was 7.6 per cent., based on the average daily population.

I regret to report two deaths by suicide occurring during the year. One man succeeded in cutting his throat with an employee's razor, which the said employee had not sufficiently protected, and one woman successfully eluded the attendants with whom she was out upon the grounds and threw herself into the lake and was drowned.

AMUSEMENTS

I have very little to add under this caption for the past year that would be new in the report. It is sufficient to state that the Commission has made us the same regular allowance as in past years for amusements, and these have been carried on in about the same way as heretofore.

We have purchased one or two new pianos, different games, etc. We have also had entertainments by outside talent from time to time during the year.

We felt it was not best to observe Field Day this year for the reason that we have had so much trouble with diphtheria; that at that particular time it was deemed unwise to bring our people too closely together.

OCCUPATION

Among the principal items that I would mention in regard to the matters that we have attended to through the occupation of our patients during the past year and outside of the usual shops and industries, which are now well known both through our reports and to those familiar with our hospital work, are the following: The cement foot-path from the center building to the Willard railroad depot was completed; we finished putting in the fire system from the east reservoir supply, connecting all the buildings and terminating at D. B. 4, and also connected barns and pasture fields with this water system, and supplied water troughs in various places. We also built cement water troughs to be located where the pipes terminated in the fields, and placed hydrants at the respective buildings so as to give us a fairly good equipment at the buildings from this water service in case of fire. At the branch the wall of the old coal shed had become very insecure. This was taken down and rebuilt. A very large amount of rock was quarried for our roads, and this, after being put through the rock crusher, was spread upon the main drive for a distance of about one mile, and the road was rolled and made over, the road roller being used whenever we could spare the help to run it. We also have

picked up certain other portions of the road, so that it seems as if in another season or two the principal drives of the hospital will be placed in excellent condition, though the road stone that we have to use for this purpose is not as good as trap rock or some kinds of granite which are available elsewhere.

Upon the roads near the lake we used a hard and dark shale that we found in our quarry, just underneath the Tully limestone formation, and this makes a fairly good road for light driving, though it pulverizes and becomes fine in a few seasons. A certain amount of grading was done in front of the superintendent's house so as to have the drive at that point more level where formerly it had been on a side hill, making it difficult to keep a team still when people were getting in and out of a wagon because of the incline of the road. Quite a number of trees were set out in the exercise field east of the electric light plant, and we were able to set young trees at detached building No. 2, and at a number of other places around the grounds. We also set hedges around the coal boxes at the outside buildings so as to make them less objectionable when the buildings are seen from the rear. We graded and seeded the lawn at the laundry for a bleaching ground. The old locomotive house in the rear of the main building was taken down and removed and a new building at a cost of about \$1,000 was erected south of the new laundry. This building is almost as convenient as the old one, and is now in a place where it is not unsightly and a detriment to the rest of the buildings. The building is supplied with water and heated by stove in winter, and was made large enough to accommodate our engine, together with a large size standard coach, thus giving better protection for the rolling stock of the railroad. East of the main building, in the grove between the building and the south wing, a number of new walks were built from different approaches, permitting the women patients hereafter to go to and fro from the buildings without having to walk through the muddy paths. An excavation was made for a new root cellar at the farm barns 28 x 66 feet and 8 feet deep. We also excavated under the old barn on

the lake farm and raised this building somewhat so as to have a basement cellar for a winter cattle barn, and the Commission in Lunacy have signified their willingness to allow us to sheathe this barn and put a new roof on it before the approach of cold weather. This will greatly increase our accommodations for stock and be a material improvement at the hospital. In building the root cellar at the farm barns we decided that we would build over this a superstructure for a toolhouse in which we would have room to place our wheelbarrows and other tools, particularly those which take considerable room. Two new stone silos, one 18 x 25 feet and the other 18 x 30 feet, inside measurements, were built, and these were surrounded by a wood jacket as advised in a bulletin issued by the Wisconsin Experiment Station. These silos were carried about four to six feet into the ground and built from that up, the top of each silo being finished off with some old brick that we happened to have on hand. We now have four silos at the hospital which in all will contain about 550 tons of silage for our stock, and even thus far, although the silos have only been filled a very few weeks, we have had practical demonstration that the silage is being kept very much better in stone silos than in the ones formerly built. There were quarried and delivered about the grounds 390 perch of stone for use for various purposes.

We loaded on our scow and brought to the hospital 600 yards of sand during the season. The sand we excavated from our own sand bank. We also have used the scow to material advantage to the hospital in other ways during the year, and recently brought from Watkins a load of over 100 barrels of salt. I mention this merely because the difference in getting this with our own help and on the barge was such that we were able to get the low price of 77 cents per barrel on the salt f. o. b., at Watkins, whereas quotations obtained any other way were comparatively a good deal higher. At the main building there was a cellar excavated for the new annex or clinic room. In the vineyard 1,300 new posts were set and wire was run upon the same. A considerable portion of the lawn

in front of detached building No. 1 was made over and graded. Various improvements were made around the bakery, and at the east end of the new storage building, and around the south wing, particularly in connecting the drain pipes and running them into ravines to take care of the surface water, etc. After the removal of the old round-house for the locomotive, the ground in between the storage building and the blacksmith shop was graded, and the track was thrown over eastward sufficiently to permit of a wagon road being run in front of the storage building. These changes effected a very great improvement in the appearance of this portion of our grounds. A new coal trestle was built at the main building to permit of our carrying a much heavier type of coal cars, such as the fifty-ton car or "gondola," in which so much of the coal is now being shipped, and a new trestle was also built at the infirmary for the same purpose. During the coming year there are some six more trestles that have got to be renewed, and we have been notified by the railroad company not to run any of these heavy cars upon them until such trestles have been replaced. Besides these improvements, which I have outlined in detail, all of the ordinary work of cleaning roads, grading for lawns, gathering crops, etc., have been attended to in the past year, the crops on the whole being about as good as on an average year, though early in the season we had reason to think that they would be very small as compared with some other season. In some respects, however, they have affected, as notable in the case of our vineyards, where the crop of grapes was only a little more than one-third as large as last year's crop, and in the matter of our tomatoes, which gave very much poorer results than usual and consequently decreased the number of cans that we could put up for our winter supply. Last year we were able to can about 6,000 gallons, but this year we estimate that we will only have about two-thirds the quantity. The hospital suffered somewhat from the scarcity of potatoes during the past year, and the crop on the hospital grounds has not been up to what it is usually. However, at the time when it was hardest for us to get

a supply of potatoes, we were compelled to resort to purchasing "culls" in the New York market, and though these were very inferior, yet they enabled us to give potatoes to our people which tasted very well, and though very small still were equally as nutritious as the larger ones. The drouth late in the season made our oat crop of exceedingly light weight, but in this we have only the same as in other localities, and on the whole we are greatly gratified to have as good crops as we have, particularly when compared with those gathered during and after the great drouth of last year which forced us to buy so much more than usual. The percentage of patients employed during the year was 51.52 per cent.

WORK OF THE MEDICAL STAFF

I have very little to specifically mention under this particular heading this year, especially as what remarks I might have to make will be more properly entered under the heading of diphtheria, or in relation to other matters. The usual staff meetings have been held, and the administration work of the hospital has been much facilitated by the opportunities afforded by these meetings for consultation and discussion. The Journal Club has continued to meet every second week, except during the hottest weather. Seven meetings of the Hospital Medical Society were held during the year, at which twelve papers were read and discussed and a number of interesting cases were presented.

I wish at this time to report that upon the previous recommendation of the superintendent, Dr. William B. Jones was appointed to the honorary position of consulting surgeon to this hospital, in which position he has heretofore assisted us so generously with his time and skill. Dr. Jones has visited the hospital quite a number of times during the year, and the results of our surgical cases have been exceedingly good, but are not mentioned here for the reason that they are recorded in the various hospital records and reports, and it is not thought

necessary to extend this report by referring to many matters of this kind which are so uniformly recorded elsewhere.

There has been an unusual amount of acute sickness among both patients and employees. One hundred and seventy-three cases have been admitted to the sick wards during the year, in addition to those cared for in the infirmaries for the aged and feeble, and those suffering from chronic diseases. Forty cases of pneumonia were cared for during the year, 23 of whom died; the death-rate from this disease being especially high among the men, ten out of thirteen cases having proved fatal.

The death-rate of the hospital on the whole number treated for the past year was 7.6 as against 5.57 per cent. for last year. This increase may be, in part, at least, explained by the large death-rate from pulmonary troubles, resulting from an epidemic of influenza and one of measles which prevailed during the year.

Towards the close of last year I regret to state that a number of cases of typhoid fever appeared, some seven in all, five of these being employees. These, with the exception of two, were all on the south wing of the main building. The plumbing of the wing was renewed during the year, and it is possible that there was some relation between this and these cases, which appeared almost simultaneously. It is gratifying to state that, although the disease ran its customary course and one or two cases were quite severe, all of the patients are well on the road to recovery.

SURGICAL WORK, ETC.

Thirty-six surgical operations of sufficient magnitude to require general anæsthesia were performed during the year; 15 of these were done by the resident staff, 14 by Dr. Jones, the consulting surgeon, and 7 by Dr. Kirkendall, the ophthalmologist. The more important operations were for the removal of tumors, the radical cure of hernia, cataract, mastoid disease, disease of the gall bladder, the cure of hæmorrhoids and repair of fistulæ, and for abdominal and pelvic conditions requiring laparotomies.

OPHTHALMOLOGICAL WORK

In addition to the several operations performed by the ophthalmologist, errors of refraction were corrected with glasses by him in 56 cases. In most of these cases there was a marked degree of disorder causing eye strain, and in some instances the resulting relief was very great. A number of inflammatory diseases of the eyes, not requiring operation, have also been treated.

GYNAECOLOGICAL WORK

Twelve operations for gynaecological conditions were done during the year, as follows:

Vesico-vaginal fistula.....	1
Fibro-myoma of uterus.....	2
Amputation of cervix.....	2
Perineorrhaphy	2
Curettage for endometritis.....	2
Curettage for polyp.....	2
Curettage of stercoro-vulvar abscess.....	1

Of the 122 women patients admitted to the hospital during the year, 108 were examined in reference to genital diseases. Of these 90 showed some gynaecological lesion, 58 of which were of a nature requiring treatment. Four hundred and seventy-two treatments were given during the year.

TUBERCULOSIS

Twenty-five patients died from this disease during the year, being 18.1 per cent. of the deaths. Eleven of the cases who died were women and 14 men. This death-rate is greater than that of last year, which was 14.7 per cent. The increase may in a measure be accounted for by an epidemic of influenza and another of measles which prevailed during the year, both of which were marked by a large amount of pulmonary trouble.

At the beginning of the year there were 42 patients in whom the diagnosis of pulmonary tuberculosis had been made, 26 being women and 16 men; at the close of the year there are 43 cases in which this diagnosis has been made, 28 of whom are women and 15 men. It is to be regretted that the steady diminution in the prevalence of this disease, indicated by the lowered death rate of the past few years, has not been sustained in the past year. Until better facilities are provided for isolation and for approved methods of treatment, however, little more can be accomplished. Under present conditions isolation is imperfect, the wards used are not suitable, and pure air, sunshine, baths and dietary can be utilized sufficiently freely and carefully. We have continued, as for a number of years past, what is known as the out-door treatment during as much of the year as it seemed at all possible or humane, patients remaining out of doors almost constantly, and we have tried to segregate our cases as much as our limited resources for this work has permitted. It is extremely desirable that in time separate pavilions for caring for tuberculosis cases should be erected upon the grounds of the hospital, enabling us to reduce the overcrowding in the buildings while at the same time providing entirely separate accommodations for patients having consumption. Now all of these cases that we can handle have to be sent to the branch and infirmary, the one building caring for women and the other for men, while I am obliged to state that a small proportion of other cases who will not fit in anywhere because of the classification of patients on the different wards, and for other reasons, are obliged to remain wherever they may happen to be in the institution. Still we make a determined attempt to keep all active cases entirely away from those patients who are healthy and from the sick.

A circular of information and regulations in regard to the prevention of this disease was issued during the year to be posted in the sick wards and distributed among the employees. This will be shown in the addenda.

MEASLES

There was an outbreak of this disease in the hospital beginning in February and lasting until June. There were 48 cases in all, 37 of whom were patients and 11 employees. The following table indicates the distribution of the disease:

LOCATION	PATIENTS			EMPLOYEES			TOTALS		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Main building, Ctr.....					1	1		1	1
Main building, N. W.....	17		17	3	3	3	20		20
Main building, S. W.....		3	3		4	4		7	7
D. B. 1.....	5		5	1		1	6		6
D. B. 3.....	12		12	1		1	13		13
D. B. 4.....					1	1		1	1
	34	3	37	5	6	11	39	9	48

There were three deaths—two patients and one employee. The employee who died was a vigorous young male attendant. He developed severe broncho-pneumonia, which proved intractable in spite of the most energetic treatment. One of the patients who died was also young and fairly strong, the cause of death being also in his case broncho-pneumonia. The other patient was old and feeble at the time he was attacked. Several other patients made fair recoveries, and some of them developed tuberculosis.

The disease was distributed by months as follows: February 1st, March 3d, April 26th, May 11th, June 7th.

DIPHTHERIA

This disease has continued to prevail almost without intermission throughout the year. There have been 47 cases in all, in which there were definite clinical signs of the disease; 12 of these were patients, 30 employees, and 5 were members of the officers' families. The following table shows the distribution of these cases among the various buildings for the year, and also since June, 1899:

LOCATION	PATIENTS			EMPLOYEES			OFFICERS' FAMILIES			TOTALS			Since June, 1899
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Main building, Ctr.....							1		1	1		1	5
Main building, N. W.....	6		6	8		8				14		14	18
Main building, S. W.....		6	6		6	6					12	12	26
D. B. 1.....				2		2				2		2	16
D. B. 2.....		1	1		1	1					2	2	5
D. B. 3.....													6
D. B. 4.....													10
Infirmary.....				3		3	1		1	4		4	16
Branch.....					6	6					6	6	14
Hillside.....													2
Superintendent's house.....					1	1	1	1	2	1	2	3	5
Employee's home.....				1		1				1		1	2
Steward's house.....							1		1	1		1	2
Farmer's house.....				1		1				1		1	4
Fan room.....				1		1				1		1	1
	6	7	13	16	14	30	4	1	5	26	22	48	132

As heretofore the disease has prevailed principally among the employees, and all except three of those affected were employed directly in the care of patients.

The cases were distributed throughout the year as follows: October 6th, November 2d, December 2d, January 2d, February 3d, March 2d, April 3d, May 1st, June 6th, July 1st, August 10th, September 9th.

There was one death—a female attendant who had been at the hospital for two weeks only. The diagnosis in this case was obscure, as the clinical signs were at first those of suppurative tonsillitis, and cultures from the throat showed strepto-cocci only. Four thousand units of antitoxin were administered on the fourth day, but without apparent benefit, and as no diphtheria bacilli had been found the remedy was not pushed. The patient died on the fifth day of toxæmia and heart failure, and the culture made the evening before she died showed a few diphtheria bacilli. This is the only death from diphtheria which has occurred in the hospital since 1897, though there have been several in the families of employees living outside the hospital premises.

The number of throat and nose examinations made during the year was 23,998, and 210 cases were found having Klebs-Loeffler

bacilli, but presenting no clinical symptoms of diphtheria. The total number of cultures taken since June, 1899, was 72,150. Of the germ cases 190 were patients and 20 were employees.

During the year the committee on diphtheria bacilli in well persons of the Massachusetts Association of Boards of Health requested this hospital to assist them in finding the prevalence of Klebs-Loeffler bacilli in unexposed healthy people. On account of lack of unexposed persons we were able to assist them only to a limited extent. D. B. 3 was selected as the building most free from infection, and 82 throat and nose examinations were made, resulting in the finding of two germ cases.

We feel that there is some objection to the system followed by the committee in considering a certain class of people examined as uninfected. Whether in a large town or city or in an institution it is very hard indeed to say whether the people thus studied could be reasonably called uninfected or not, particularly for the reason that in a town or city there is or has been recently infection in the neighborhood, just as we have or have had infection in a large institution, making a distinction in this way between present time and different times past. Even if we do not find an infection in a certain division of an institution to-day with the ordinary methods usually followed, there is no way of telling whether infection may not actually be present in that certain healthy people are carrying around diphtheria germs upon certain inaccessible portions of the mucous membrane of the throat or nose. Experience tends to show that in a given community the disease little by little runs its course, and those in a receptive condition acquire the disease, which runs its usual course, and they get well and thereafter themselves come down again from time to time until the trouble finally loses its force and dies out. In the case of this particular hospital the duration of the disease has been exceedingly long, considering that the trouble has been almost entirely among adults. I know of no other case having the same history. Even in an institution for children the course of the usual epidemics is not so long as it has been in our case, though there

may be some exceptions. It will be of peculiar interest to all professional men to follow the course of the diphtheria epidemic at this institution, particularly if we can establish what special causes may exist to perpetuate this disease at this place, than is usually the case elsewhere. We are not inclined to attach too much importance to the matter of healthy people carrying diphtheria bacilli in their throats, except when these germs are virulent, for the reason that we recognize that in the general community, particularly in large cities, a certain proportion of people must be carrying these germs at all times. Healthy people can certainly transmit diphtheria to others by carrying to them germs which, in their own cases, give them no trouble, while still capable of producing disease in others in a receptive condition. I believe that in many cases these germs become attenuated and gradually lose virility to such an extent that the disease reaches a point at which it can no longer redevelop. On the other hand, there is reason to draw the deduction that if these same germs become implanted on exceedingly favorable soil, just as they become attenuated on the one hand, on the other they gradually increase in virility until a new epidemic centers elsewhere than before. Very much indeed depends apparently upon the receptive condition of the individual exposed to the disease, and we have a large number of varying conditions both of infectiousness on the one hand and virulence on the other, and according as to whether the disease is on the increase or on the wane the results are either insignificant or easy to attain much importance.

We are still able to note the finding mentioned in previous reports, to the effect that we have not found that the diphtheria has become reestablished in individuals once discharged from quarantine after having obtained three successive negative cultures taken on alternate days, unless these people suffered exposure in an infected ward. As to how much value this finding has, aside from its practical application in enabling us to set some definite time on which to discharge from quarantine, remains to be seen. We believe, however, that on a large

amount of mucous membrane in the throat and nose, which is inaccessible, it is very possible that small colonies of attenuated germs might lurk unsuspected for a long time, and with the change in the condition of the system gradually increase in virulence until capable of spreading disease of a very malignant character. Even if we are unable to get any facts that are more definite, the experience referred to has been in the case of this institution of very great assistance in helping us to stamp out the diphtheria, and bacteriologists will recognize that we have gone rather further in basing our limits than is usually done in the ordinary health board work.

Of the various types of bacilli, as described by Professor F. F. Wesbrook, Minneapolis, Minn., the most commonly found are those illustrated in his Plate II, fig. 1, and Plate IV, fig. 1. Of the types described by him in Plate IV, fig. 3; Plate V, fig. 3; Plate VI, fig. 4, none have been observed in any membrane case during the year. Comparisons were made as to the after effects of antitoxin of different strength, resulting favorably to the use of the concentrated form.

We have had until the present time some few patients in our detention wards almost constantly throughout the entire year, and for a great deal of this time patients who were convalescing within the quarantine ward as well as those confined in detention wards. Very recently (October 1, 1901) we have been able to discharge the last patient that we had in our detention wards, though we still hold five or six people in the quarantine building proper, proceeding through convalescence from this disease. A new element that has come up in this matter has been the appearance of the diphtheria in the families of the employees upon the street. Until this season we have always been able to confine the trouble, providentially, within the buildings of the hospital, but this year it has appeared on the street just outside of our grounds among the children of our employees, and there have been two or three deaths from this trouble, and just now there are one or two active cases still under treatment. With this disease having a foothold in the

outside community, we feel that it is going to be harder to stamp this trouble out even than when it was confined to the institution.

All the usual methods of handling quarantine—disinfection of wards, rooms, clothing, bedding and other articles,—and every other known measure of stamping out this disease, have been followed, though apparently we are still having to fight it. It would seem as if there were some peculiar local conditions that predispose to this disease in the Willard State Hospital, and this matter is being given careful attention by the hospital authorities. We do know that there is reason to believe that the contaminated water supply has a direct as well as indirect effect by lowering the vitality of the people, or directly producing throat troubles which are recognized by some bacteriologists as attributable to polluted water, so that the diphtheria bacillus being present is easily ingrafted upon the inflamed throats which result from the various conditions referred to. It is possible, too, that the proximity to the lake, where the water is so exceedingly cold, and the varying air currents during the twenty-four hours, some of them being very much colder than others, result just as in other cases near large bodies of water and upon the sea coasts in an increased number of colds and sore throats among those residing at those places. While we continue to have buildings needing to be replumbed, and other bad sanitary or hygienic conditions, such as contaminated water supply, defective drainage around the cellars of our buildings, or cellars which are not effectually sealed from ground damp, etc., we will hardly know what to attribute the continuance of this epidemic of diphtheria to. We hope eventually to be able to get appropriations from the Legislature to remedy the conditions referred to, and trust that we will then be able to put a stop to this disease, even if it does not disappear long before.

I feel that there is reason for more apprehension, as I stated before, to dread the appearance of diphtheria in the families of our employees than its actual occurrence in the institution. The

average medical practitioner in private practice and the average health board seldom take the precautions that we have taken in stamping out the disease, they taking the ground that it is impossible ordinarily to have people remain contentedly in the irksome restrictions necessary to bring the disease to a standstill by enforcing quarantine, etc., when prescribed in the same manner as we have done, and I very much fear that in the case of this neighborhood it may be necessary later for steps to be taken to try and get the State Board of Health to regulate and establish the system to be followed in the surrounding community in passing upon cases of throat inflammation and in quarantining people known either to have diphtheria or to be carrying Klebs-Loeffler bacillus in their throats. At present in the case of some of the medical practitioners no germ cultures whatever are taken in any ordinary cases, and I have been told of some that were suspiciously like diphtheria which were also treated in the same way. If this practice continues in the future, even if we get rid of the disease in the institution, I am afraid we are destined to have a long run of the trouble from its reintroduction from outside, and the only way apparently of remedying this would be to get cooperation along the same lines that we have followed by those medical practitioners whose territory immediately adjoins the hospital, or if we get a case where we can definitely prove that diphtheria is brought into the hospital, for us to institute legal proceedings against those through whose neglect or carelessness it may have had a chance to spread.

AUTOPSIES

Thirty-one autopsies were made during the year. There has been a decided falling off in the number of autopsies during the past two years, as indicated by the following figures:

Bodies buried in hospital cemetery	Years	Autopsies
45	1897-98	45
56	1898-99	46
42	1899-1900	28
52	1900-1901	31
==	=====	==

The number of autopsies has to be regulated to some extent by the wishes of the friends as to this matter.

LABORATORY

The laboratory work as carried on in the past year has been principally devoted to the handling of the diphtheria epidemic by reason of necessity. Some other work of a special character has been followed, but for the most of the time our resources have been pretty well taxed to their utmost with the examination of cultures for diphtheria bacilli and other work of this kind. Extra assistants have been employed from time to time during the year by permission of the Lunacy Commission, as has also extra help in replacing those that were sick elsewhere. Still in the laboratory there have been times when we found it very difficult to get anybody to fill the positions satisfactorily and to assist as we have desired in the culture work, especially during the college year when all the young men whom we would be most likely to look for are engaged with other studies.

MEDICAL LIBRARY

The number of bound volumes in the medical library was increased by 117 during the year.

TRAINING SCHOOL FOR NURSES

During the past year there were 40 applicants admitted to the school; 17 were graduated from the school—13 women and 4 men, and 20 passed the junior examination.

The number of changes during the past year among the employees has been a disadvantage to the training school, as referred to in the year previous. Last year there were 139 all told who left the hospital, for the most part by resignation. These changes we feel are very largely because of the isolation of the hospital and its inaccessibility. If at some time in the future an employees' home could be built for women, with good large and attractive recreation rooms attached to it, and

some additional facilities of the same sort provided in the way of recreation rooms for the men employees, I am of the opinion that those who come to the institution, by reason of their finding their surroundings so much more pleasant, would be more inclined to remain contentedly during the period for which they usually engage when coming here.

Six volumes were added to the nurses' library. This library has been a real acquisition, as can readily be appreciated by an examination of the record showing the extent to which it has been used.

PATIENTS' SCHOOL

This has been conducted regularly as heretofore, and we think with decided advantage to the patients. Ninety patients have attended, the average daily attendance being 28; 34 of those who were attending school have been discharged during the year. In addition to the regular school exercises the teacher has given instruction in calisthenics, dancing and basket-ball, and several outings and entertainments were enjoyed during the year. The public recital, consisting of a programme of vocal and instrumental music, readings, recitations and tableaux, was very successful, and was a source of pleasure to all the inmates of the hospital. Altogether the work of the school is of considerable value.

COST OF MAINTENANCE, ETC.

The per capita cost for maintaining this hospital for the past year was \$3.06, and, while this exceeds the per capita of last year, which was \$2.966, I would draw attention to the fact that our expenditures were necessarily very much larger than last year owing to the failure during the past year of the farm crops, due to the great drouth from which this section suffered. We also had some expenditures chargeable to the quarantine that it was necessary to maintain because of the diphtheria in the hospital, and in some instances there were expenditures charged during the past year to maintenance account, which I believe in

some other years were charged to extraordinary improvements or to repairs. Except for reasons of this kind, the hospital was run in the same manner and approximately in exactly the same way as previously, and there were therefore good reasons for the increase in cost noted.

BANK FAILURE

Under this heading I have to report to your board that the depository for the funds of the Willard State Hospital suspended operations April 25th of this year, and a large amount of funds of the hospital were tied up because of this suspension. It happened that the wages had been paid, except for such moneys as had not been collected by those to whom they were due by reason of their failing to present their checks, or their not having been here at the time, and all of the vouchers for the March payments had been prepared and were all ready to deposit in the mail the morning the bank failed, when of course it was too late to send them out.

Our quarterly report, based upon anticipated payments that we knew to be absolutely correct because of the presentation of bills corresponding to amounts, etc., had been forwarded to the Comptroller, and this showed that we had but a comparatively small balance in the hands of the bank, though the reason for this was the fact that we have always been hurried to get this report to the Comptroller and the Lunacy Commission at as early a date as possible to enable them to tell what provision they would have to make for the ensuing period. Even had the vouchers and checks been mailed to the creditors at the time referred to, it would have been too close to the failure of the bank for us to avoid payment, as we could not have claimed that due diligence had not been exercised by the parties receiving these checks on account of their not having any opportunity to get them back. The result, therefore, would have been the same had the checks been sent out as it was their not having been sent out. However, this failure brought to our attention the fact that owing to the bank being somewhat at arm's length

from the hospital, it was possible for the depositary to hold these funds rather longer than would be the case with the treasurer's office established in the hospital buildings, and since this occurrence the treasurer's office has been moved permanently to the hospital, and we find that business has been expedited considerably by this change. The amounts tied up in the bank are shown by the following list:

Patients' funds.....		\$2,040 46
Salaries	\$159 01	
Wages	361 50	
Supplies	20,353-56	
		<u>\$20,874 07</u>

To meet the payments of the March bills, which were held back because of the failure of the bank, and the loss of the funds set aside for the payment of these vouchers, the Commission finally made arrangements with the State Comptroller to advance to us from the maintenance account amounts that would offset what we had tied up in the bank, this step being taken to prevent the impairment of the credit of the hospital and the State, and all outstanding bills were settled with money thus advanced. The depositary of the funds of this hospital was known as the banking house of Leroy C. Partridge, and since the failure this bank has been placed in bankruptcy and proceedings are now under way, under the referee in bankruptcy and three trustees, to settle up the affairs of the concern. It is impossible for us to say what the State will get out of this settlement, but there is good reason to believe that the dividends paid are likely to be quite small. You will notice in the table above that the moneys are divided up under State funds, and that there is also an item of moneys deposited and credited to the treasurer of the hospital by transfer some time last year from the steward of the hospital that have been accumulating at the institution for many years that are known as patients' funds. These moneys consist first of moneys that were brought

in upon the person of the patients admitted to the institution, varying from a penny to several dollars or more; next of moneys given or sent a patient or to the hospital for the patient for the purchase of luxuries for the patient; and thirdly, interest that had accumulated on the deposits made by the steward in times gone by. These sums were previously carried by the steward and cannot be treated as State funds, and I presume that these moneys will have the same relative position as the deposits of single creditors, and that some day dividends will be paid over to the treasurer to offset the sums deposited for the patients in the bank as referred to. It would seem as if, this being the case, that it would be very difficult to know how to divide or even prorate this money, particularly as a good many of the patients must have been dead for years, and in all probability this will constitute a small and rather insignificant fund in the future that may some day have to be disposed of by order of the courts or by a special act of the Legislature. I merely mention it at this time so that it may be a matter of record, and also to properly inform your board as to the exact situation of matters.

IMPROVEMENTS

Under this caption I give a list of the principal items that were attended to during the past year under the head of extraordinary expenditures. This list is practically self-explanatory, and therefore I will not go into all of the details in narrating what each item consists of. As will be seen, in some of the cases the work done was in continuance of work begun and undertaken during the previous year.

Additional laundry machinery.....	\$213 95
Steam carving tables (cast iron).....	46 50
Work on food-car tramway to kitchen.....	151 25
Food-car tramway doors.....	73 20
Spray baths at infirmary and branch.....	701 75
Steam heating plant at hotel.....	477 61
Switches at locomotive house and scales.....	423 48

Addition to hillside.....	\$300 22
Furniture	651 75
Sewer, D. B. 4 to lake.....	82 50
Pantries, D. B. 3.....	728 86
North annex to main building.....	2,045 24
Trestles at main building and infirmary.....	447 39
Iron beds.....	242 25
Main steam pipe, renewals.....	1,515 13
Radiators, attendants' rooms.....	710 17
Safe for superintendent's office.....	150 00
Changes and improvements in heating apparatus in pursuance of recommendations of Mr. R. S. Hale, mechanical engineer and expert.....	1,374 81
Plumbing in south wing.....	6,275 00
Laying water pipe in garden.....	573 78
Kinyoun-Francis autoclave.....	90 00
Sewing machines.....	105 00
Changes in fan room.....	106 74
Two stone silos.....	1,126 09
Safe for treasurer's office.....	160 00
Changes in refrigerator building.....	152 79
Repair roofs and paint outside buildings.....	170 60
Root cellar.....	492 02
Repairs to barn at lake farm.....	290 43
Cement walks	240 00
Repairs to hotel.....	117 57
<hr/>	
The sum total for extraordinary expenditures amounted to.....	\$20,775 27
<hr/> <hr/>	

NEEDS OF THE HOSPITAL

Last year, before the time of the fall visit made the Lunacy Commission, we are asked to prepare a list of items which we wished to have considered, and these were looked over in detail by the Commission at the time of their visit and certain ones selected for incorporation in the budget of the expenditures to

the Legislature, and early in the spring we were notified to continue the work laid out under this list, which is partly included among a number of items figuring in the above list. Other matters, as for instance the tile floor for the kitchens at the infirmary and detached building No. 1, are still in hand, and it may be necessary to run these over until spring before being able to complete the work. The reason for this delay has been that, owing to the steel strike this year, it will be almost impossible to get the beams that are needed in the flooring, and one delay has come after another until with the approach of cold weather we may deem it best not to have this undertaken until the warm season comes again. There are other matters still, like the change of the water supply, etc., which have required very thorough investigation and close study of all of the matters appertaining thereto in order to avoid useless expenditure of large sums of money, and this also remains still to be attended to. Then again, in the matter of the plumbing of the different buildings, there was approximately a matter of \$10,000 set aside for completing this work, and this matter was referred to the State Architect's office, but we have not as yet been supplied with plans and specifications so that this work could be advertised for, but undoubtedly this will be well in hand during the coming winter and spring. For the coming year we were a little more hurried concerning the preparation of our estimates than last year, and owing to sickness and other matters we were not able to have some of the estimates completed at the time of the visit of the Commissioner in Lunacy to consider these items. The result was that one item which we would have liked to have considered—the building of a congregate dressing and clothing room in connection with the congregate bath room already supplied on the north wing, together with a staircase and fire escape which we have desired to have built for some years, and which change would give us a number of additional rooms for patients on that wing, besides increasing the economy of administration, etc.—has had to go over until another year. With this exception I give simply a copy of the

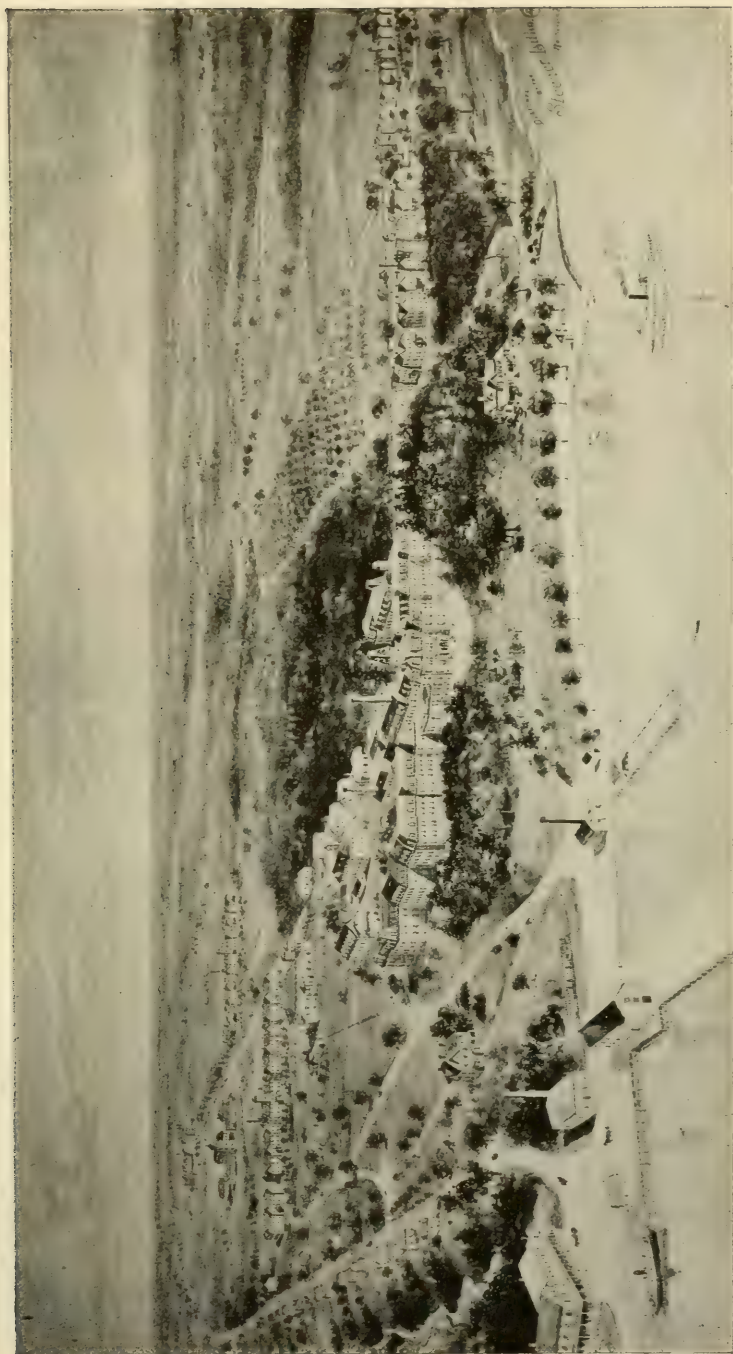
list furnished the Commission, which includes all items brought to their attention, but which was not passed upon at the time of the visit so that we could tell what items were approved.

IMPROVEMENTS AND REPAIRS DESIRED DURING 1902

Additional irrigating pipes in garden.....	\$2,500
Sidewalks and gutters.....	350
Connecting corridors, three remaining ones D. B. 2..	1,800
Coal trestles, to replace old ones, six at \$300 each...	1,800
New boiler for steamboat.....	1,000
Changing drawheads and air-brakes on cars.....	964
Cold storage building	1,800
Additions and repairs to lake farm.....	550
Enlarging boot rooms and additional story. (This will save at least one-half hour per day for every patient going to work.) \$400 each.....	1,600
New forcing house in garden.....	650
House for tenant near piggery.....	900
Change in water supply. (Cannot estimate cost at present.)	
Fire-proof vault for public records, and extension to medical offices	5,000
Extension of culvert across ravine near south wing.	500
Poultry house and yards.....	500
Outside and inside painting of buildings.....	3,500
Fruit orchards and vineyards.....	300
Improvements to basements. (Cost not estimated.)	
Tuberculosis wards. (Cost not estimated.)	
New locomotive.....	10,000
New plumbing	10,000

MEDICAL STAFF

Among the medical staff there have been the following changes during the past year: Albert G. Bising, medical interne, appointed to the position of junior physician at the Long Island State Hospital, Kings Park, December 1, 1900; William J. Cavanaugh, M. D., appointed medical interne, January 8, 1901,

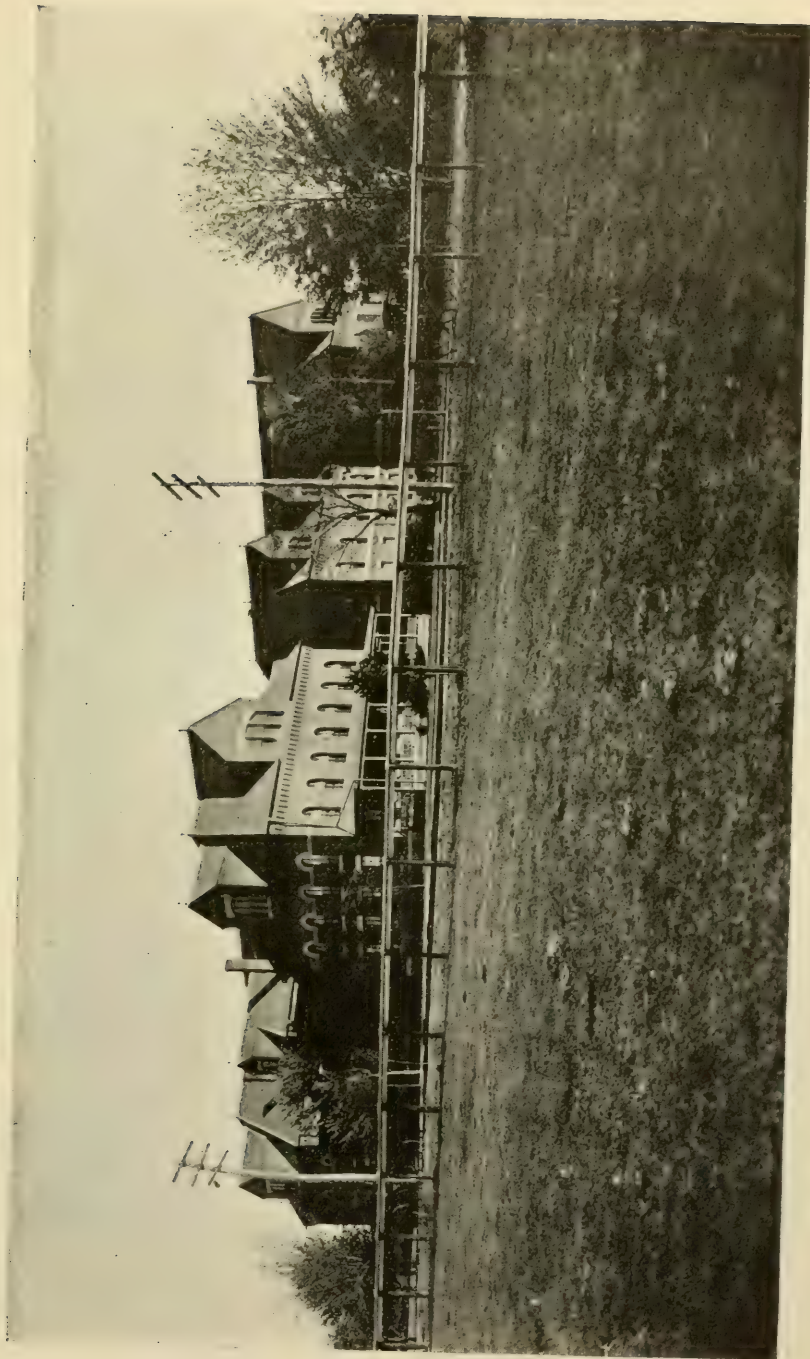


WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW OF HOSPITAL AND GROUNDS.

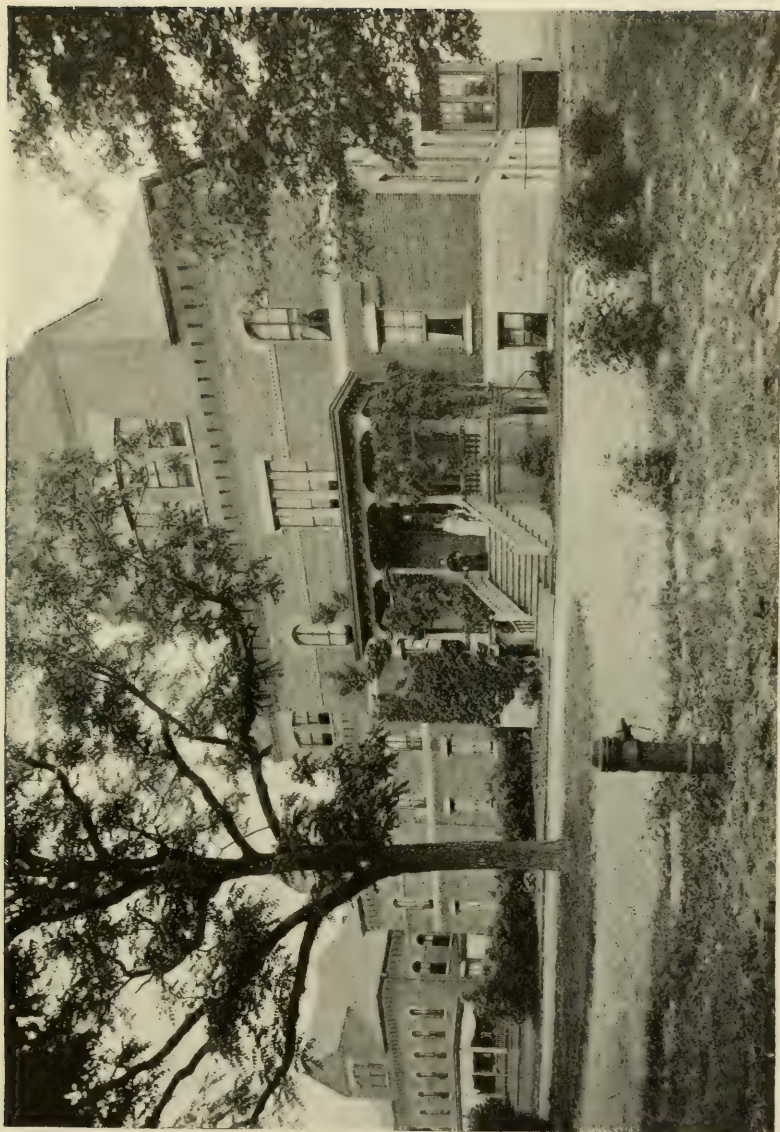


WYMKOP HALTERBY CRAWFORD CO.

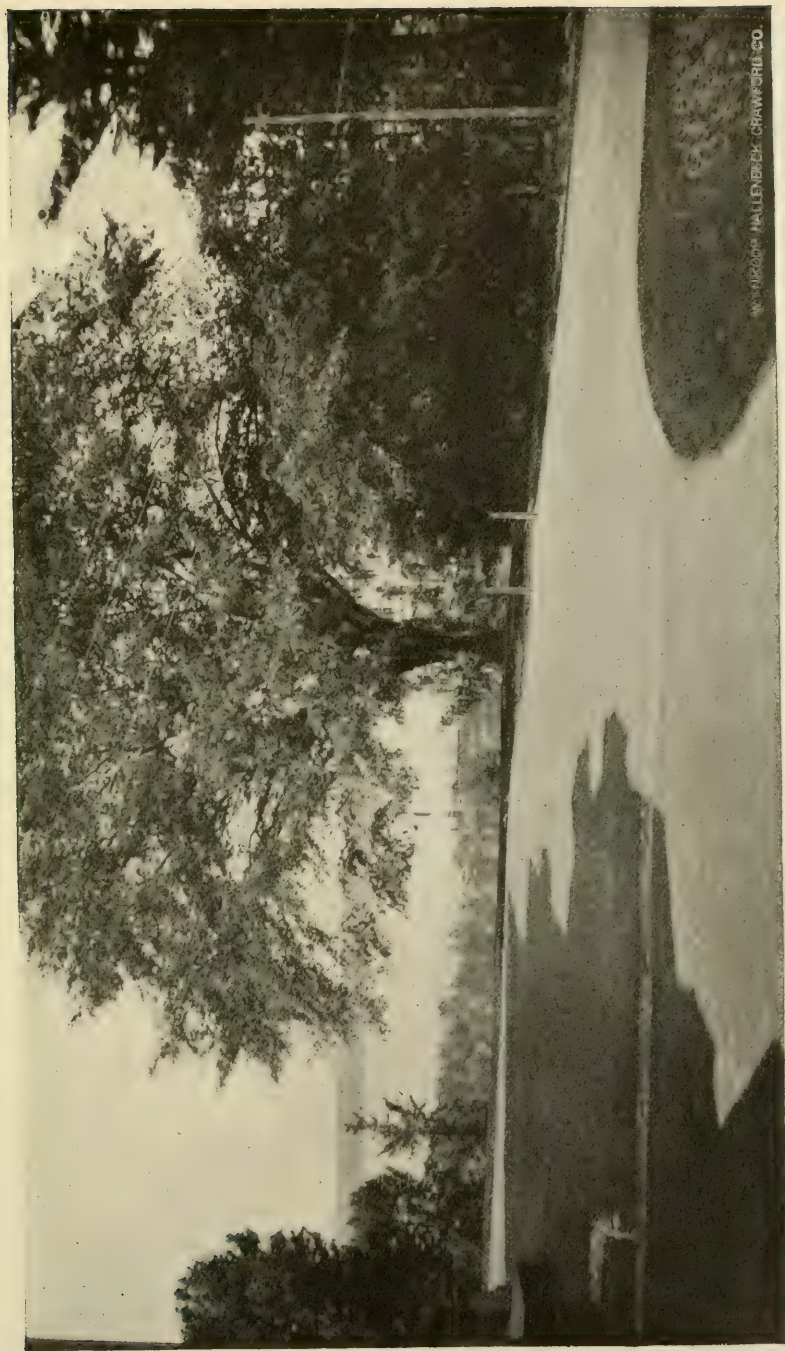
WILLARD STATE HOSPITAL.—THE NORTH WING OF THE MAIN BUILDING.



WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM THE NORTHEAST.

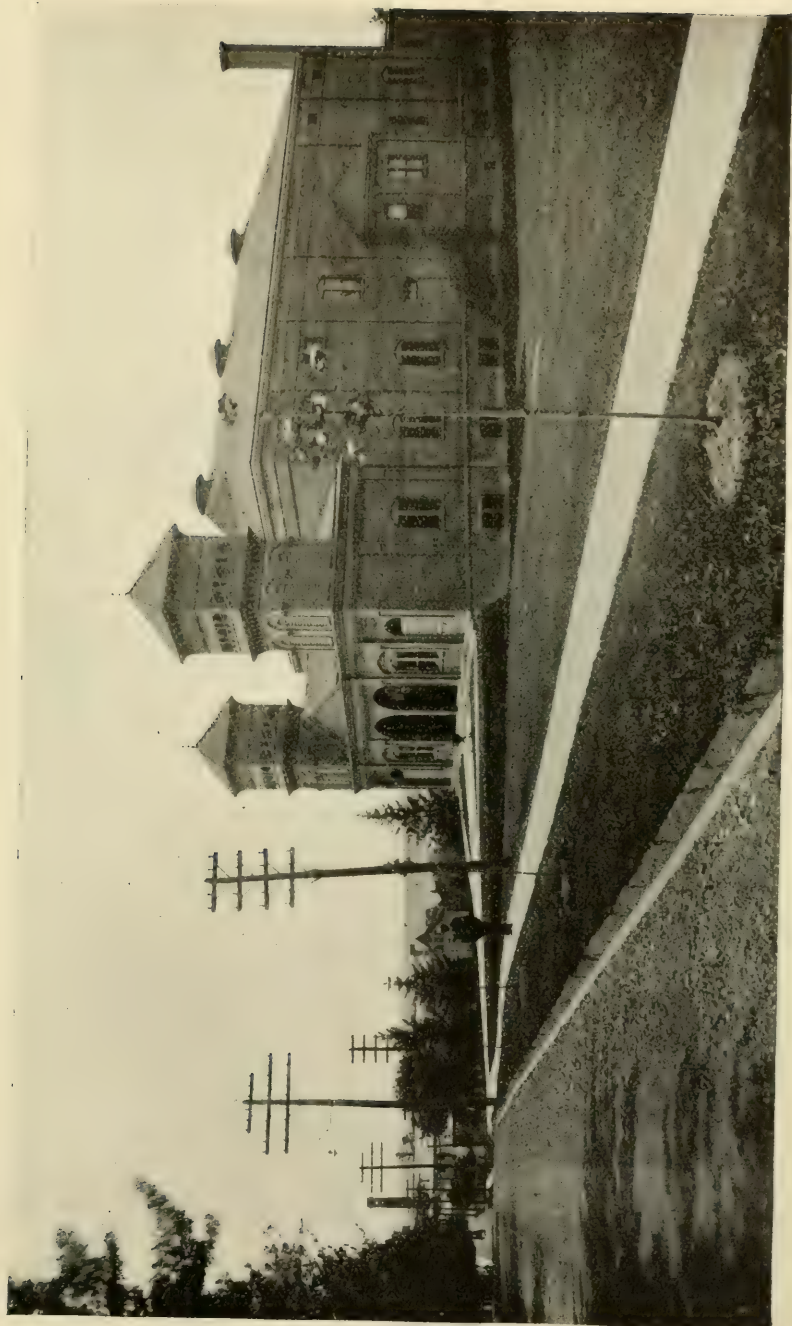


WILLARD STATE HOSPITAL.—VIEW OF BRANCH FROM THE WEST.

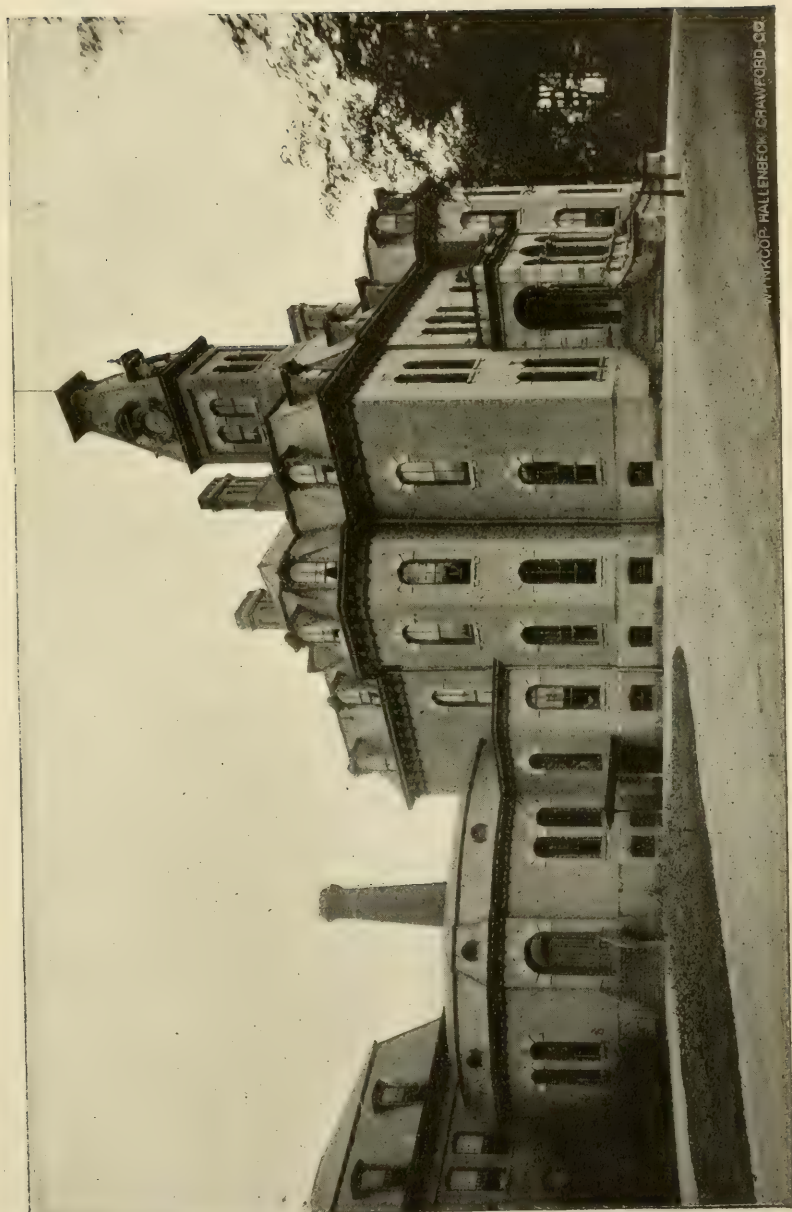


WILLARD STATE HOSPITAL.—VIEW IN FRONT OF ADMINISTRATION BUILDING.

W. H. HALL & SONS, CRAWFORD CO.



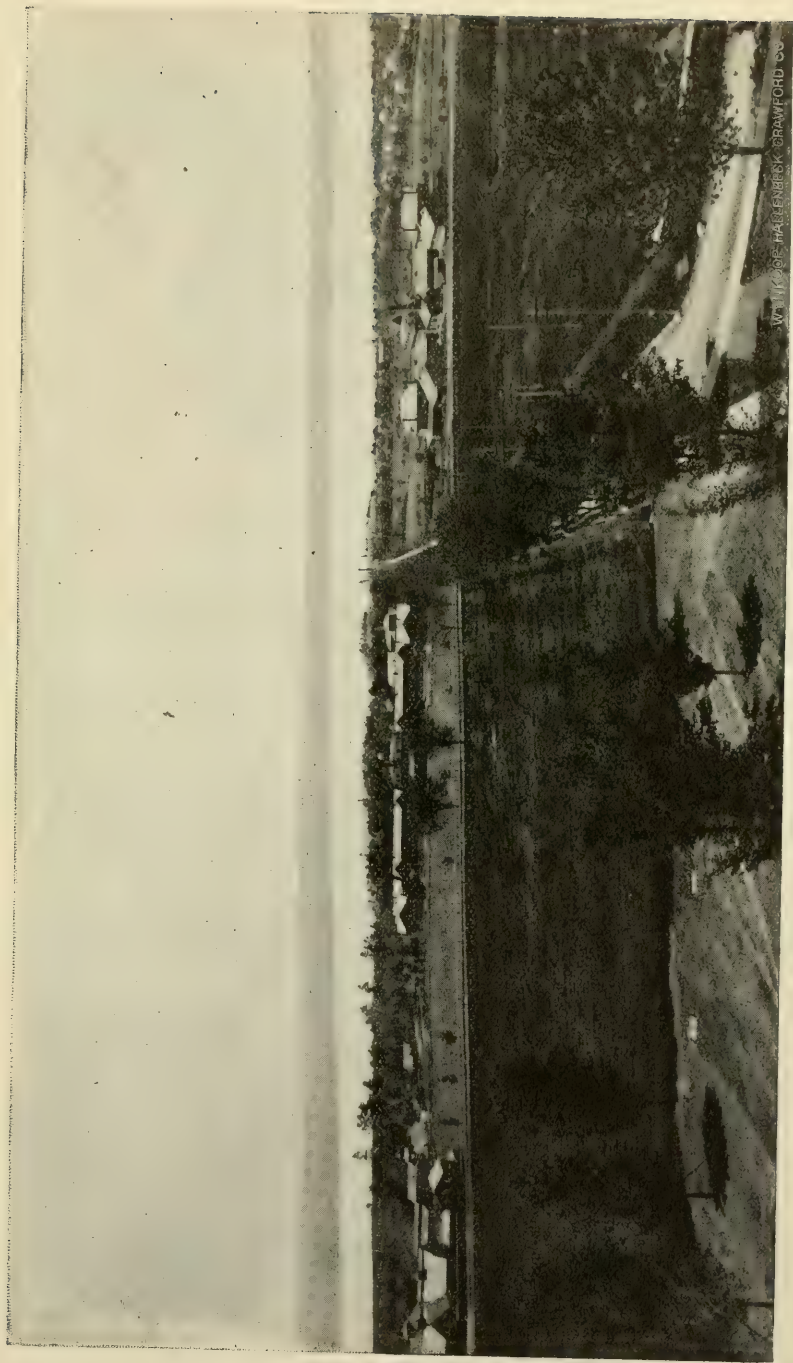
WILLARD STATE HOSPITAL.—AMUSEMENT HALL.

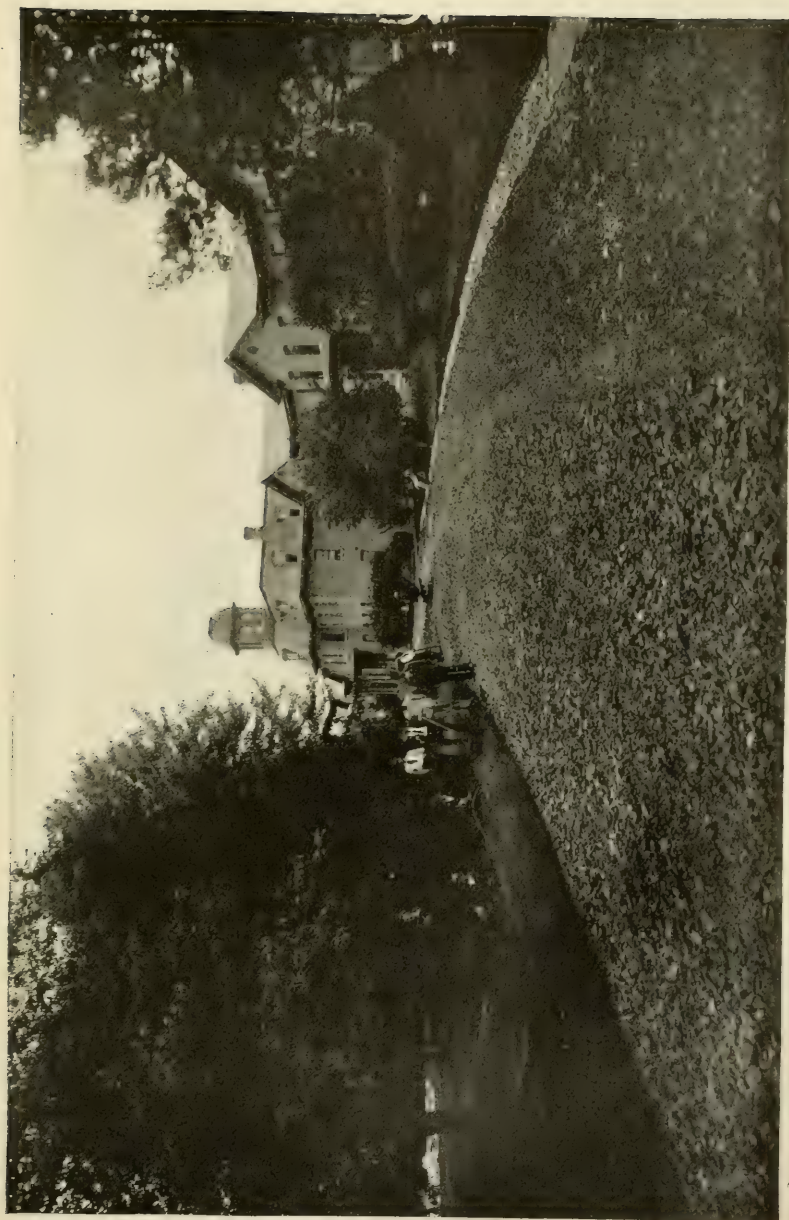


PHOTOGRAPH BY WALLACE CRAWFORD CO.

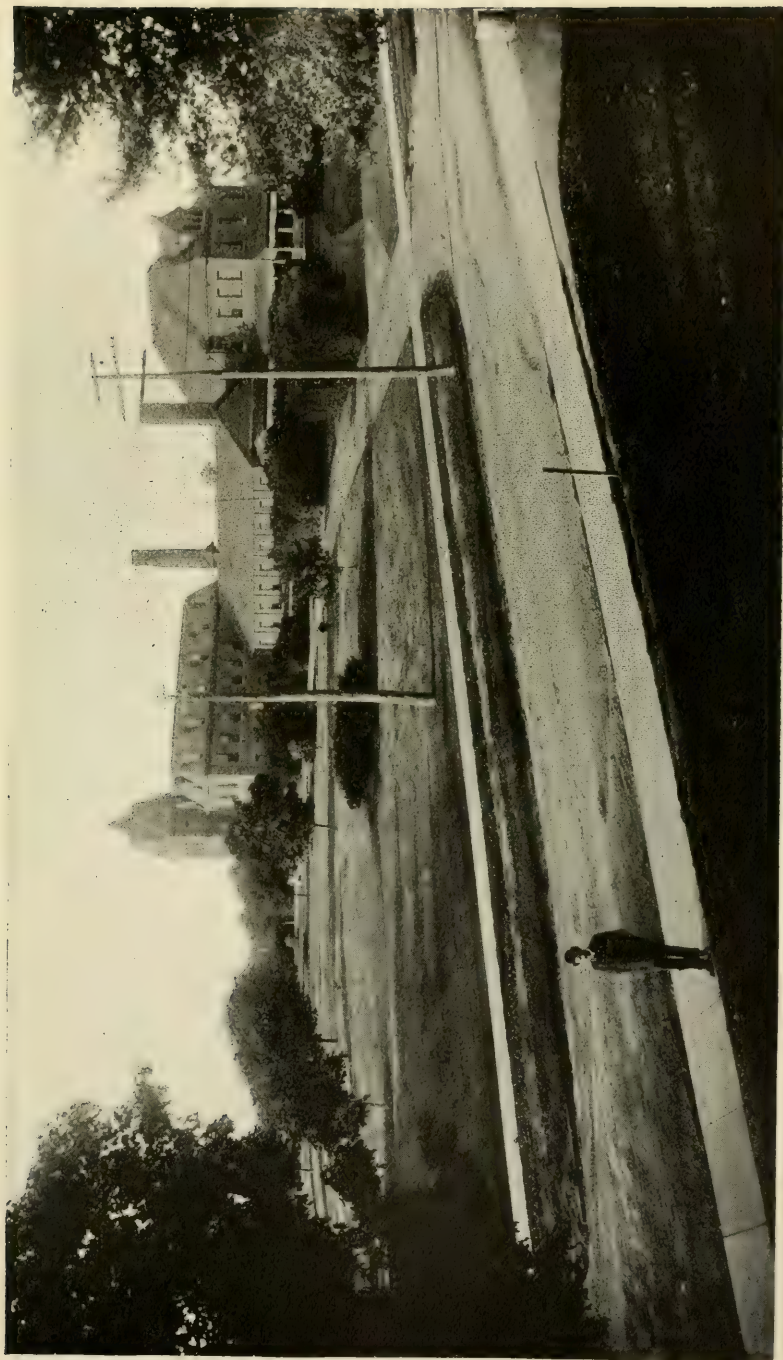
WILLARD STATE HOSPITAL. — MAIN BUILDING.

WILLARD STATE HOSPITAL.—BIRD'S-EYE VIEW LOOKING TOWARDS THE LAKE FROM THE BRANCH.

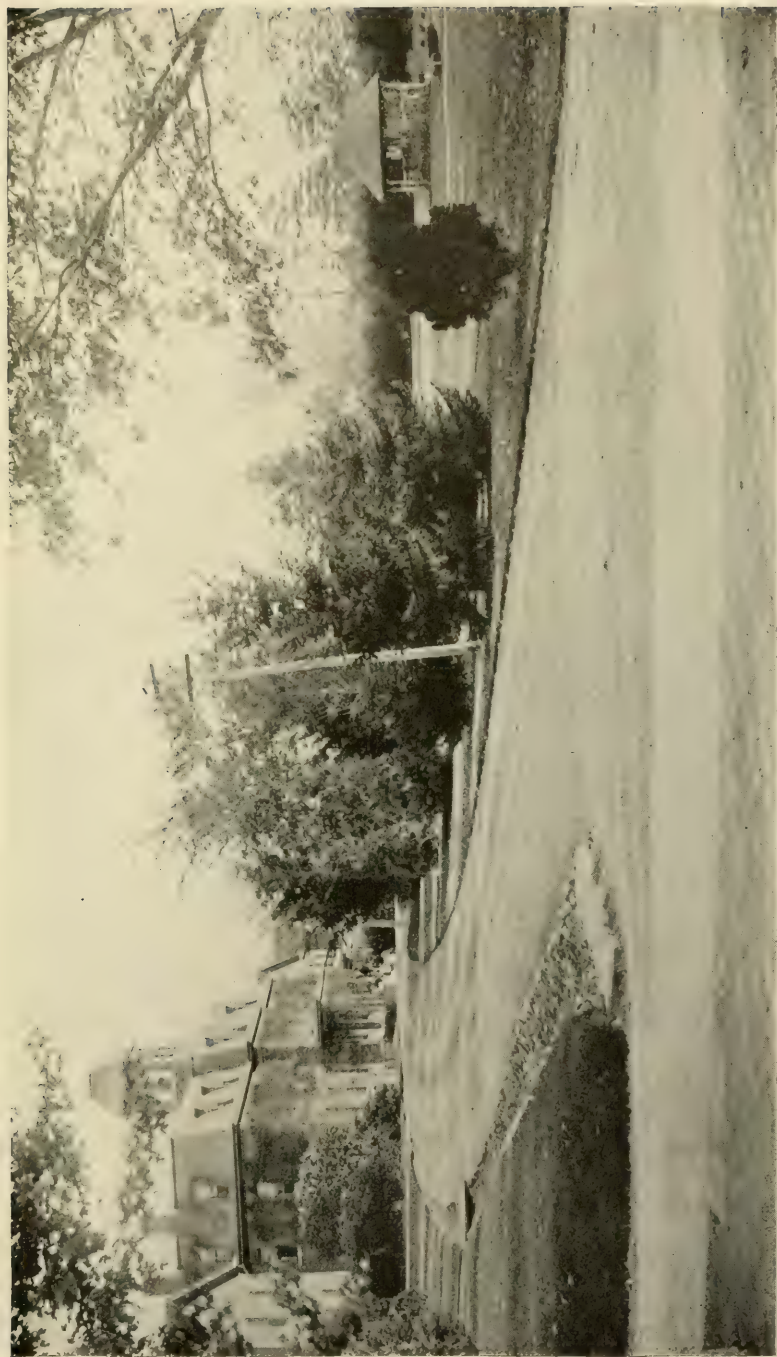




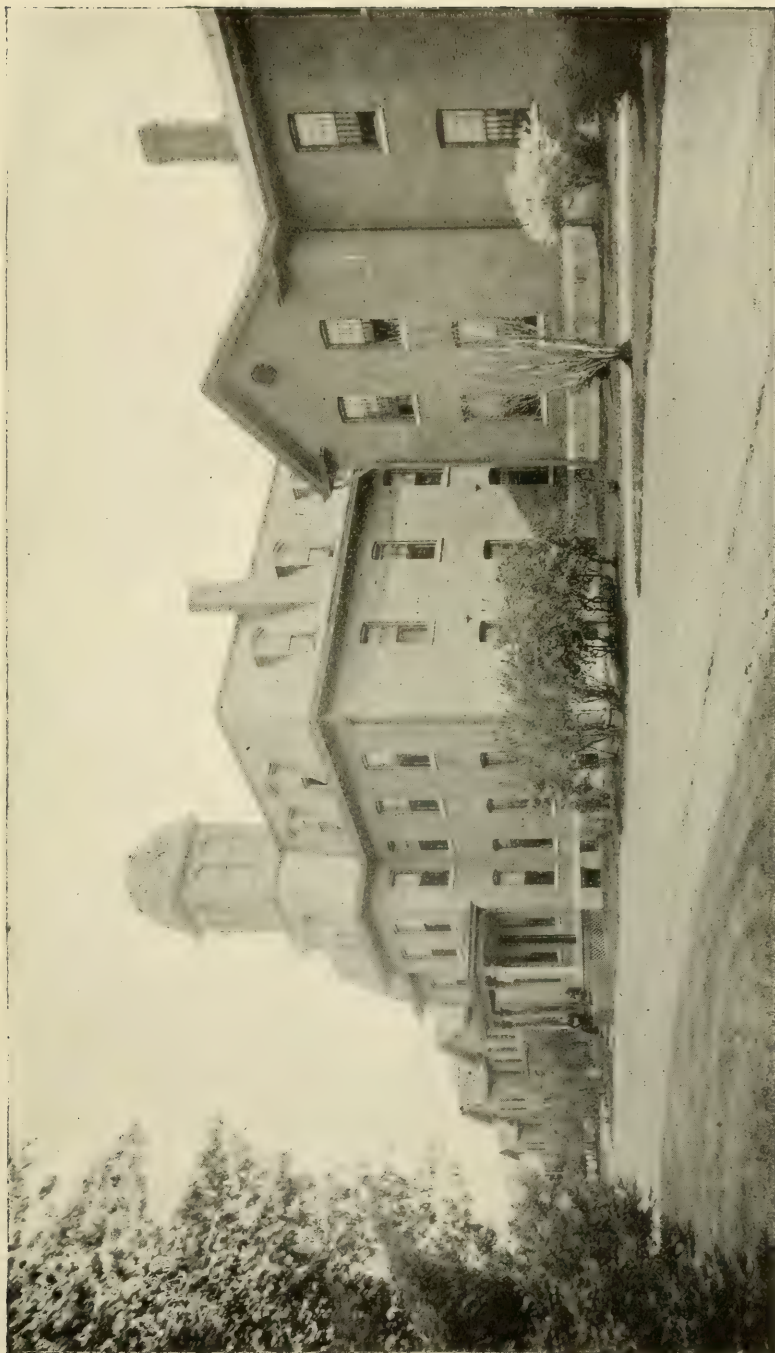
WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 1. PATIENTS MAKING A NEW ROAD.



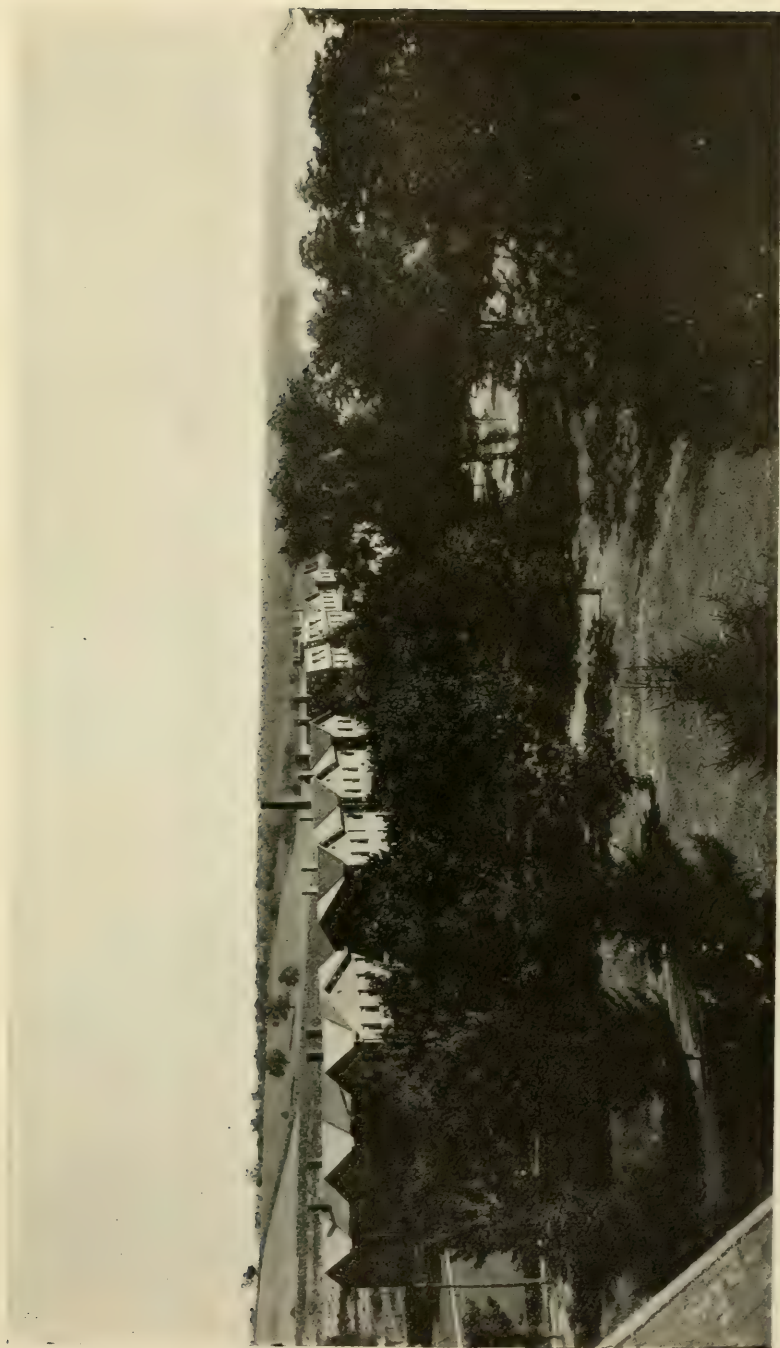
WILLARD STATE HOSPITAL.—INFIRMARY FOR MEN.



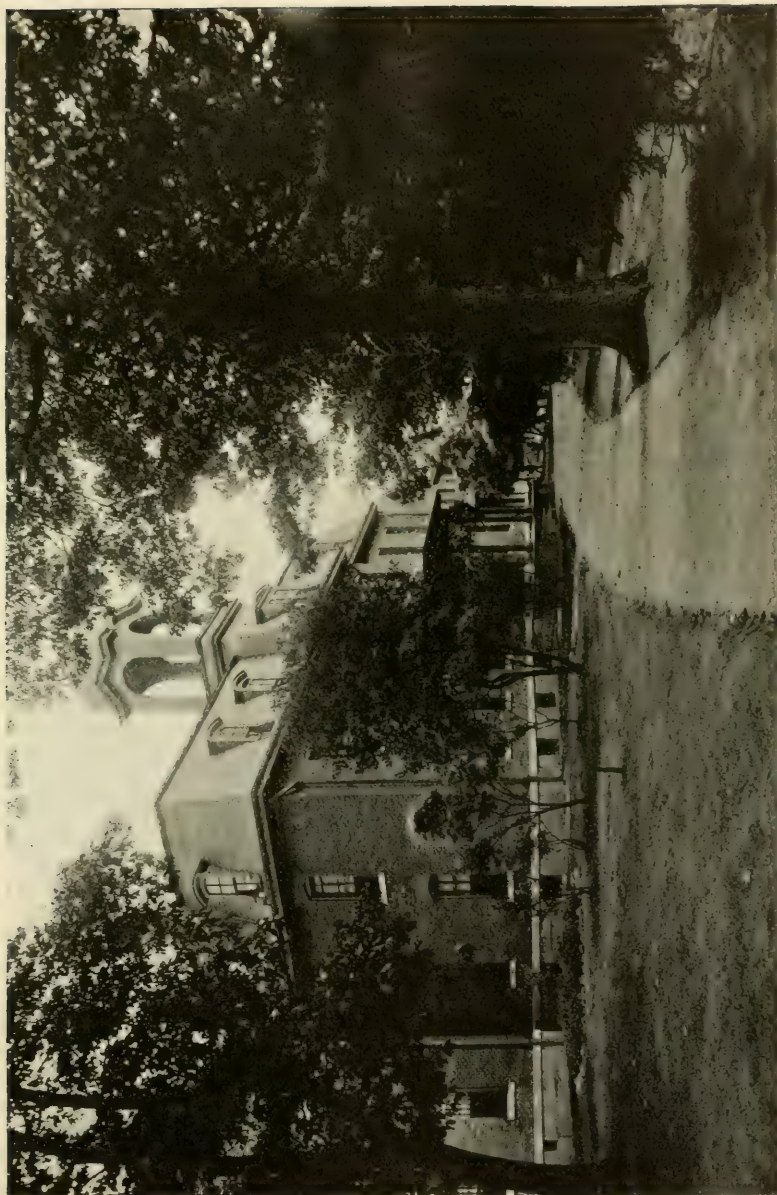
WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.



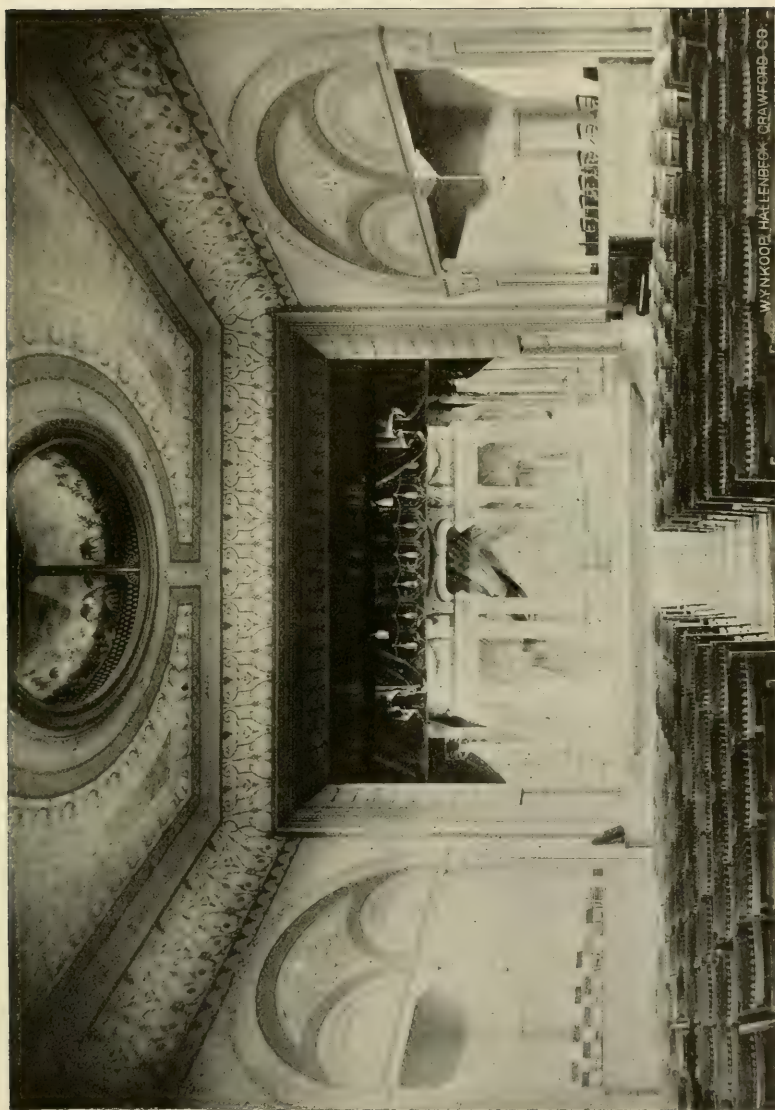
WILLARD STATE HOSPITAL.—DETACHED BUILDING No. 1.



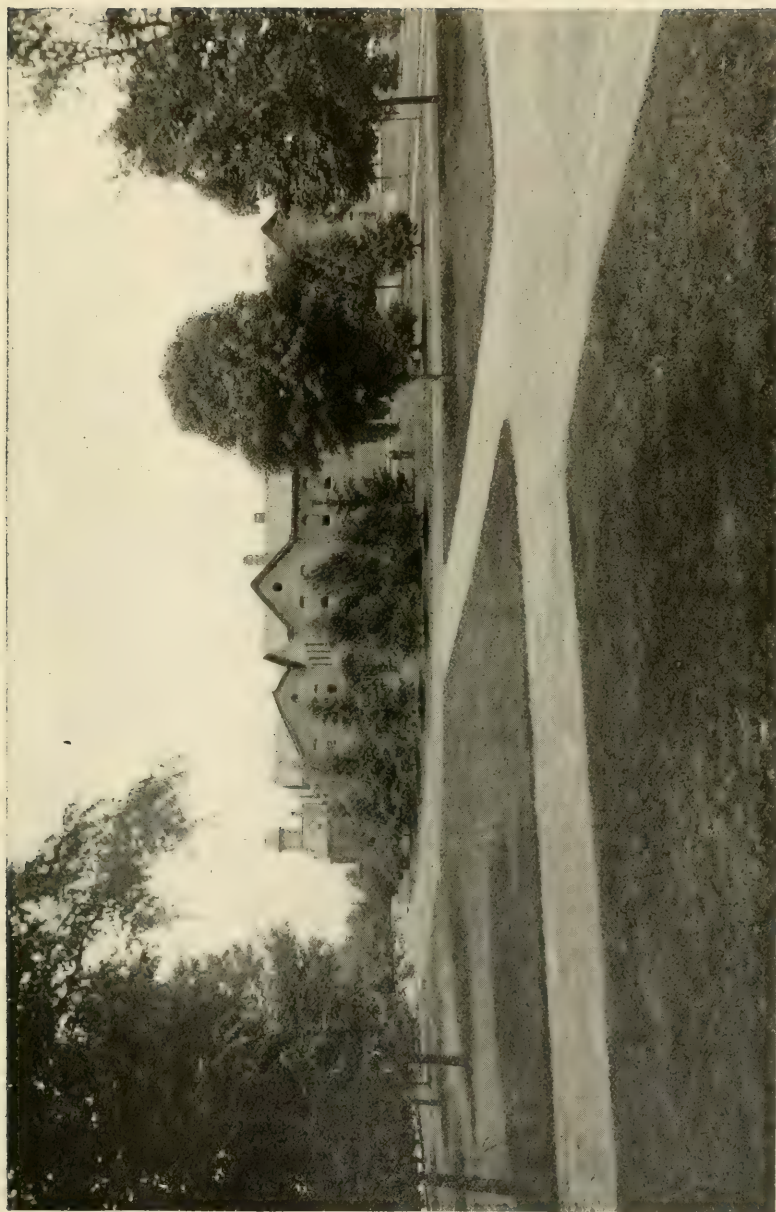
WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 4.



WILLARD STATE HOSPITAL.—DETACHED BUILDING No. 2.



WILLARD STATE HOSPITAL.—INTERIOR OF AMUSEMENT HALL.



WILLARD STATE HOSPITAL.—DETACHED BUILDING NO. 3.

and transferred to Hudson River State Hospital, January 18, 1901; Theodore W. Simon, M. D., appointed medical interne, February 25, 1901; Robert M. Andrews, M. D., resigned September 26, 1901, to go into private practice; William H. Montgomery, M. D., appointed medical interne, September 28, 1901.

EMPLOYEES

The following deaths occurred among the employees during the past year: James Martin, fireman, killed at electric light plant by runaway car November 30, 1900; Mrs. Anna C. Lovelace, supervisor, died January 4, 1901; John M. Ryan, attendant, died April 17, 1901; Emma J. Fish, D. R. attendant, died May 29, 1901; Gertrude J. Frazer, attendant, died August 24, 1901.

ACKNOWLEDGMENTS

Religious services of visitation have been performed during the past year, and we desire to tender our thanks to Rev. H. A. Porter, Rec. C. W. McNish, Rev. Wesley Mason, Rev. Joseph W. Hendrick, Rev. J. A. Kennedy and Rev. Thos. J. Harrington, who succeeded Rev. J. A. Kennedy during the year, all of Ovid.

Contributions of reading material have been received as follows:

Attica News, Attica, N. Y., 1 copy.

Auburn Weekly Bulletin, Auburn, N. Y., 1 copy.

Auburn Democrat and Argus, 1 copy.

Allegany County Democrat, Wellsville, N. Y., 2 copies.

Albion Free Lance, Albion, N. Y., 1 copy.

Addison Advertiser, Addison, N. Y., 2 copies.

Addison Record, Addison, N. Y., 1 copy.

Batavia Daily News, Batavia, N. Y., 1 copy.

Batavian, Batavia, N. Y., 1 copy.

Brooklyn Eagle, Brooklyn, N. Y., 1 copy.

Cochecton Times, Cochecton, N. Y., 1 copy.

Cayuga Chief, Weedsport, N. Y., 1 copy.

Castilian, Castile, N. Y., 1 copy.

Christian Uplook, Buffalo, N. Y., 1 copy.

Caledonia Advertiser, Caledonia, N. Y., 1 copy.
Cayuga County Independent, Auburn, N. Y., 1 copy.
Cuba Patriot, Cuba, N. Y., 1 copy.
Clyde Times, Clyde, N. Y., 1 copy.
Deaf-Mute Journal, New York city, 1 copy.
Dansville Advertiser, Dansville, N. Y., 1 copy.
Democratic Herald, Clyde, N. Y., 1 copy.
Dryden Herald, Dryden, N. Y., 1 copy.
Farmer Review, Farmer, N. Y., 2 copies.
Geneva Advertiser, Geneva, N. Y., 1 copy.
Geneva Gazette, Geneva, N. Y., 1 copy.
Geneva Courier, Geneva, N. Y., 1 copy.
Groton and Lansing Journal, Groton, N. Y., 1 copy.
Holly Standard, Holly, N. Y., 1 copy.
Hammondsport Herald, Hammondsport, N. Y., 1 copy.
Hornellsville Times, Hornellsville, N. Y., 1 copy.
Hornellsville Weekly Tribune, Hornellsville, N. Y., 1 copy.
Ithaca Daily News, Ithaca, N. Y., 3 copies.
Ithaca Democrat, Ithaca, N. Y., 1 copy.
Livingston Republican, Geneseo, N. Y., 1 copy.
Lake Shore News, Wolcott, N. Y., 1 copy.
Le Roy Gazette, Le Roy, N. Y., 1 copy.
Livonia Gazette, Livonia, N. Y., 2 copies.
Montour Falls Free Press, Montour Falls, N. Y., 1 copy.
Mount Morris Enterprise, Mount Morris, N. Y., 1 copy.
Naples Record, Naples, N. Y., 1 copy.
Orleans American, Albion, N. Y., 1 copy.
Oakfield Reporter, Oakfield, N. Y., 1 copy.
Ovid Gazette and Independent, Ovid, N. Y., 2 copies.
Ontario County Times, Canandaigua, N. Y., 1 copy.
Ontario County Journal, Canandaigua, N. Y., 4 copies.
Prattsburg News, Prattsburg, N. Y., 1 copy.
Perry Herald and News, Perry, N. Y., 2 copies.
Penn Yan Express, Penn Yan, N. Y., 1 copy.
Penn Yan Democrat, Penn Yan, N. Y., 1 copy.
Seneca County Courier, Seneca Falls, N. Y., 1 copy.

Seneca County Journal, Seneca Falls, N. Y., 1 copy.
Seneca County News, Waterloo, N. Y., 1 copy.
Seneca County News, Geneva, N. Y., 1 copy.
Seneca Reveille, Seneca Falls, N. Y., 3 copies.
Southern Steuben Republican, Woodhull, N. Y., 1 copy.
Spirit of the Times, Batavia, N. Y., 1 copy.
Steuben Courier, Bath, N. Y., 1 copy.
Steuben Farmer's Advocate, Bath, N. Y., 1 copy.
Truth, Catholic Magazine, Raleigh, N. C., 1 copy.
Union Springs Advertiser, Union Springs, N. Y., 1 copy.
Victor Herald, Victor, N. Y., 1 copy.
Waterloo Observer, Waterloo, N. Y., 1 copy.
Watkins Express, Watkins, N. Y., 1 copy.
Watkins Democrat, Watkins, N. Y., 1 copy.
Watkins Review, Watkins, N. Y., 1 copy.
Union and Advertiser, Wayland, N. Y., 1 copy.
Yates County Chronicle, Penn Yan, N. Y., 2 copies.
New York Herald, New York, 24 copies.

SPECIAL ACKNOWLEDGMENTS

I desire to again note in my official report the assistance and cordial cooperation shown us in regard to the handling of our epidemic of diphtheria by Herman M. Biggs, M. D., and William H. Park, M. D., of the New York health department. These gentlemen have indeed been most kind to us during the fight that we have had with diphtheria, and it is gratifying to me to be able to record our appreciation.

OFFICIAL VISITS

The members of your board and members of the State Commission in Lunacy have visited the hospital from time to time during the past year.

Dr. Robert Ellis Jones and Mrs. Clara E. Field made several visits to the hospital during the past year for the State Charities Aid Association.

HISTORICAL REVIEW

I wish to draw particular attention to the historical account concerning this hospital which I have copied directly, but with the addition of a few remarks, explanatory tables, etc., of my own, from the report written by the superintendent of the institution in 1887, and printed at that time on the hospital press. There are many items of historical value concerning the hospital in this account, particularly in regard to the early acts of the Legislature, etc., and I do not remember having seen this account in any of the annual reports. It is placed in the report for this year because of the convenience for reference in the future, though I have left out certain plans of the buildings, etc., which were contained in the original historical account.

Very respectfully yours.

WM. AUSTIN MACY

Medical Superintendent

ADDENDA

NOTES OF VISIT OF COMMISSIONERS PETERSON AND PARKHURST TO
WILLARD STATE HOSPITAL JULY 17 AND 18, 1901

The Commissioners arrived the evening of July 16th and departed at 11 a. m. July 18, 1901.

The superintendent, Dr. Macy, was quarantined with diphtheria, but matters were discussed with him as required. Dr. Russell and the rest of the staff were on duty.

All of the patients committed during the past sixteen months (since the last visit of Dr. Wise, March 17, 1900), and still remaining, were seen by the Medical Commissioner. Lists filed at Albany.

All departments were inspected by both Commissioners—buildings, farms, outhouses, etc.—with a view to necessary improvements or additions. The administration is commended. Everything pertaining to the welfare of the patients is efficiently done and well ordered.

FREDERICK PETERSON

WILLIAM L. PARKHURST

WILLARD, N. Y., *July 18, 1901*

STATE OF NEW YORK—WILLARD STATE HOSPITAL

CARE OF TUBERCULOSIS PATIENTS—MEMORANDA AND RULES

The Nurse

1. Tuberculosis is a preventable disease, and it is the duty of the nurse to see that rules to prevent its spread are observed by herself and others.

2. The sputum is the greatest source of danger, especially when it becomes dry.

3. When working about a patient, always wear over your uniform a washable gown with sleeves. This must be worn only then, and must be kept absolutely clean and disinfected.

4. Avoid standing close in front of a patient who is coughing or speaking.

5. Wash your hands frequently, and always just before eating.

6. After handling a patient or any article in contact with him, dip your hands in disinfectant, after washing. Wear rubber gloves when cleansing spittoons, cups, or other articles soiled with sputum. Be careful at all times to protect with collodion any abrasion or cut on your hands.

The Patient

1. Fresh air, sunshine, abundant, wholesome, nutritious food are the essentials.

2. Keep patients out of doors as much as possible, and in the sunshine, unless too warm. Shelter from high wind.

3. All ailments, however slight, should be reported to the physician as soon as possible.

4. Keep close clinical records. Weigh all patients not confined to bed weekly, and note weight on chart.

5. As far as possible the patient should be induced to cooperate in carrying out preventive measures—in caring for sputum—placing a handkerchief before the mouth when coughing, etc.

6. Great care should be taken to keep patient's nails, hair, mouth, teeth and face perfectly clean and disinfected. Male patients must be clean shaven.

Care of the Ward or Room

1. Sunshine and fresh air must be admitted freely. At least one window should be open all night, and several times a day the patients should be made comfortable, and one or more windows opened.

2. The temperature should be seldom over 65°, and the patients should be warmly clad.

3. Scrupulous cleanliness must be the rule.

4. Flying dust is dangerous. Brooms, brushes, feather dusters, or dry cloth dusters must not be used. Cleaning and dust-

ing of floors, woodwork, furniture, etc., should be done by means of damp cloths. These should be washed at short intervals during the work and soaked in disinfectant before they are put away.

5. Rugs, mattresses, table covers, blankets, etc., should be placed in the sunshine outdoors for four or more hours twice weekly.

6. Floor, furniture, bedsteads, woodwork and sidewalks, as high as can be reached, should be washed with disinfectant twice a week.

Clothing and Bedding

1. Bedding, clothing, towels, handkerchiefs, napkins, etc., must be kept scrupulously clean, and changed frequently.

2. If such have been about a patient they must be placed in water immediately upon removal, and afterwards boiled or placed in disinfectant.

Dishes, etc.

1. Dishes, glasses, spoons, etc., must be placed in water and boiled or washed in disinfectant immediately after being used by patients.

2. Portions of food left by patients must be burned, and the vessel in which they were carried boiled or washed with disinfectant.

Sputum

1. Patients should as far as possible be induced not to swallow the sputum.

2. As far as possible they are to be taught to use spittoons and cups.

3. When this is not possible, moist rags which should be at once placed in water may be used. In exceptional cases a bib may be necessary.

4. A little water must always be kept in spittoons, and a small piece of wet cotton in each cup.

5. The paper portion of cups must be burnt once daily, and

oftener unless sputum is scanty. Rags must be used once only and kept moist until destroyed. Bibs must be changed when soiled, before sputum dries. Spittoons and the metal portion of cups must be cleaned and soaked in disinfectant once daily, and oftener unless entirely free from soiling by sputum.

6. If sputum lodges on an article of clothing, bedding, etc., the article must be at once removed, and treated as directed above.

7. If sputum lodges on the floor, wall, furniture, mattress, etc., it must be removed at once with a piece of moist paper or rag, and the place washed with disinfectant.

8. Evacuations from the bowels, discharges from abscesses, etc., in tubercular cases are to be treated as sputum.

WM. AUSTIN MACY

Medical Superintendent

March 1, 1901

REPORT OF THE TREASURER

To the Board of Managers, Willard State Hospital

Gentlemen.—The undersigned, the treasurer of the Willard State Hospital, submits the following statement of receipts and disbursements for the year ending September 30, 1901:

Receipts

Balances on hand October 1, 1900:

To salaries	\$24 98
To wages	273 22
To supplies	144 01
To clothing manufacturing department	1,661 09

Total balance on hand October 1, 1900.....	\$2,103 30
Received from State Comptroller for salaries...	20,310 00
Received from State Comptroller for wages.....	129,300 00
Received from State Comptroller for supplies...	205,500 00
Received from reimbursing patients.....	20,705 20
Received from private patients.....	448 14
Received from steward's sales.....	2,158 54
Received from steward's sales, clothing manufacturing department	4,389 69
Received from banking house, L. C. Partridge, interest	178 25
Received from cash refunded.....	265 00
Received from State Comptroller, special funds, chapter 364, Laws of 1900.....	9,187 21
Received from State Comptroller, special funds, chapter 322, Laws of 1901.....	11,764 54
Received from State Comptroller, special account for payment of voucher deferred by the failure of the hospital depositary in April, 1901.....	18,136 03
Total receipts	<u>\$424,445 90</u>

Disbursements

To pay vouchers under estimates as follows:

Estimate No. 1, salaries.....	\$20,289 89
Estimate No. 2, wages.....	129,313 94
Estimate No. 3, Provisions and stores.....	110,292 97
Estimate No. 4, ordinary repairs.....	8,262 58
Estimate No. 5, farm and grounds.....	11,297 60
Estimate No. 6, clothing.....	22,834 04
Estimate No. 7, furniture and bedding.....	8,111 92
Estimate No. 8, books and stationery.....	2,692 28
Estimate No. 9, fuel and light.....	29,733 82
Estimate No. 10, medical supplies.....	3,016 52
Estimate No. 11, miscellaneous expenses.....	10,315 08
Estimate No. 12, transportation of patients.....	4,589 85

Total disbursements under estimate 1-12....	\$360,750 50
To pay State Treasurer sundry receipts under chapter 580, Laws 1899, as amended by chapter 326, Laws 1900.....	18,854 35
To pay special funds under chapter 364, Laws 1900	9,187 21
To pay special funds under chapter 322, Laws 1901	11,764 54
To pay voucher for March, 1901, payment of which was deferred by the failure of the hospital depository, the banking house of Le Roy C. Partridge, Ovid, N. Y.....	18,136 03
Sundry receipts from April 1, 1901, to date of failure of the hospital depository April 25, 1901, including balance on hand as of April 1, 1901	2,885 59
Balance on hand, including cash on hand ad- vanced to pay transportation of patients and with the Ithaca Trust Company, of Ithaca, N. Y., the hospital depository.....	2,867 68
Total	\$424,445 90

Classification of Balances

Balance on hand to salaries.....	\$27 75
Balance on hand to wages.....	160 45
Balance on hand to supplies.....	2,679 48
Total	<u>\$2,867 68</u>

In connection with and as an addition to the foregoing report it is desired to say that of the amounts entered herein as receipts the balance of \$1,661.09 to the clothing manufacturing account and the further amount of \$4,389.69, or a total of \$6,050.78, was in December last by direction of the Commission in Lunacy transferred to the general fund or maintenance account and the clothing manufacturing account closed.

On April 25, 1901, the banking house of LeRoy C. Partridge of Ovid, N. Y., which had been the hospital depository for a number of years, closed its doors, the owners thereof having made a general assignment for the benefit of their creditors. This assignment was of considerable importance to this department of the hospital, as it tied up a large portion of the funds furnished to the hospital for the payment of expenses for the month of March.

A reference to treasurer's report for the month of March, as originally made and filed, will show that the receipts for the month of March were \$36,851.79, and that the disbursements amounted to \$36,596.72, and had these payments been actually made, the balance on hand as of the first of April would have been as entered, \$255.07. As the work of the treasurer's office, especially that pertaining to the vouchers, is done entirely from the vouchers, only such vouchers as were called for by the claimant in person had been paid. This, however, includes the greater part of the two vouchers for officers' salaries and employees' wages. Following the custom of compiling the treasurer's monthly report from the vouchers, and of sending this report when completed and mailing the vouchers with check on the depository to the claimants, it is considered that such report

then shows the completed condition of the month's business. This routine was followed and the month's report completed and sent forward to the Commission in Lunacy and Comptroller showing the small balance of \$255.07, and just as the vouchers and checks were made ready for the mail we were confronted with the information that the bank had assigned. With this information before us it was useless to mail vouchers and checks. The result would have been the same had it been possible to have mailed vouchers and checks earlier, as checks could not have reached the claimants in time to have them presented through proper channels and payment made by the bank before its failure. Had it been possible to have so mailed the checks, even though they had just reached their destination, the report would have shown the completed condition and the amounts represented by the vouchers would still be claims against the hospital.

An examination of the books of the hospital was made by a representative from the Comptroller's office within a few days after the failure and found to be correct.

At the time of the failure there had been issued checks for \$141.67 for salaries, \$719.67 for wages and \$18,917.66 for supplies; checks for the first two amounts had all been delivered, while the greater part of the last named, while just completed, had not been delivered. An examination of the accounts and an investigation in each case where checks had been issued and delivered, made by the hospital attorney, resulted in the decision that of the amounts mentioned above, \$141.67 for salaries, \$262.67 for wages and \$17,731.69 for supplies, were good, valid and subsisting claims against the State, there being no fault, misconduct or negligence on the part of the payees, making a total claim of \$18,136.03. Estimates were made to the Commission for this sum, and after the approval the amount was remitted to us and the claims paid. Of the checks issued and outstanding at the time of the failure there remains \$457 for wages and \$36.08 for supplies that in the opinion of the attorney the negligence of the holder in presenting was sufficient to discharge the hospital from any claim.

The sum thus advanced of \$18,136.03 with the amount that would have been the balance of \$255.07 as of April 1st and the further sundry receipts during the month of April of \$2,630.52 or a total of \$21,021.62 is the claim of the hospital against the bank for which a properly verified claim has been filed.

Against this sum there are some small offsets, consisting of an overdraft of \$45 for the special fund account occasioned by the payment by the bank of checks prior to the receipt of special fund moneys from the Comptroller, and the sum of \$147.55, the amount of two checks for supplies for the month of April that were issued in advance of the regular audit, and the additional sum of \$77.92 paid by the bank for steward's advance orders that had been paid by the bank and carried as cash item, making a total offset or counterclaim of \$270.47.

Since the assignment was made some of the creditors made an application for the appointment of a referee in bankruptcy, and the affairs of the bank are now in the hands of three trustees; the settlement of the same is proceeding slowly, and at the present time it is impossible to predict what the outcome will be.

Respectfully submitted.

HENRY PETERSON

Treasurer

REPORT OF STEWARD

WM. AUSTIN MACY, Esq., *Medical Superintendent, etc.*

Dear Sir.—I respectfully submit herewith the report of the steward's department for the year ending September 30, 1901.

Respectfully

M. J. GILBERT

Steward

The following report of the farm and garden products, stock on hand, articles manufactured and the classification and summary of expenditures for maintenance for the year ending September 30, 1901, is respectfully submitted:

FARM PRODUCTS

Alfalfa hay, 35 tons, at \$5.....	\$175 00
Alfalfa, green, 60 tons, at \$2.....	120 00
Apples, 403 bushels, at 40 cents.....	161 20
Beef, 14,525 pounds, at 5.9934 cents.....	870 54
Corn, sweet, 1,295 bushels, at 40 cents.....	518 00
Corn for silo, 630 tons, at \$3.50.....	2,205 00
Cornstalks, 15 tons, at \$3.....	45 00
Corn fodder, 100 tons, at \$3.25.....	325 00
Currants, 2,072 quarts, at 4 cents.....	82 88
Chickens, 708 pounds, at 9 cents.....	63 72
Calves, alive, 79.....	137 00
Ducks, 237 pounds, at 10 cents.....	23 70
Eggs, 1,209 dozen, at 14.68 cents.....	177 58
Grapes, 5,456 pounds, at 1 cent.....	54 56
Hay, 279 tons, at \$10.....	2,790 00
Hides, cow, 1,449 pounds, at 6.5 cents.....	94 18
Hides, bull, 150 pounds, at 5.5 cents.....	8 25
Hides, veal, 9.....	10 50
Lambs, 620 pounds, at 6.57 cents.....	40 75
Mutton, 1,490 pounds, at 6.75 cents.....	100 58
Milk, 397,090 quarts, at 2.5 cents.....	9,927 25
Milk, 77,574 quarts, at 2 cents.....	1,551 48

Pork, 33,527 pounds, at 5.5 cents.....	\$1,843 99
Pigs, 378 pounds, at 4 cents.....	15 12
Pigs, alive, 32.....	68 50
Peaches, 14½ bushels, at \$1.....	14 50
Pears, 26½ bushels, at 50 cents.....	13 25
Pelts, lamb, 8.....	3 40
Rye, 348 bushels, at 55 cents.....	191 40
Raspberries, 1,192 quarts, at 6 cents.....	71 52
Strawberries, 1,256 quarts, at 7 cents.....	87 92
Straw, wheat, 40 tons, at \$4.....	160 00
Straw, oats, 25 tons, at \$4.....	100 00
Turkey, 108 pounds, at 12 cents.....	12 96

ESTIMATED—NOT HARVESTED

Apples, 1,400 bushels, at 40 cents.....	560 00
Buckwheat, 150 bushels, at 40 cents.....	60 00
Corn, late, ears, 600 bushels, at 30 cents.....	180 00
Mangel wurzels, 6,000 bushels, at 20 cents.....	1,200 00
Oats, 2,100 bushels, at 35 cents.....	735 00
Potatoes, 3,000 bushels, at 50 cents.....	1,500 00
Wheat, 2,100 bushels, at 72 cents.....	1,512 00

Total of farm products..... \$27,811 73

GARDEN PRODUCTS—HARVESTED

Asparagus, 241 bushels, at 30 cents.....	72 30
Beans, string, 105 bushels, at 50 cents.....	52 50
Beans, Lima, 75 bushels, at \$1.....	75 00
Beets, 167 bushels, at 25 cents.....	41 75
Carrots, 7 bushels, at 30 cents.....	2 10
Cabbage, 658 heads, at 3 cents.....	19 74
Cucumbers, 129 bushels, at 50 cents.....	64 50
Corn, sweet, 500 bushels, at 25 cents.....	125 00
Lettuce, 1,176 bushels, at 40 cents.....	470 40

Onions, 35 bushels, at 50 cents.....	\$17 50
Onions, green, 332 bushels, at 45 cents.....	149 40
Potatoes, 66 bushels, at 75 cents.....	49 50
Potatoes, 68 bushels, at 50 cents.....	34 00
Peppers, 15 bunches, at 75 cents.....	11 25
Parsley, 75 bunches, at 3 cents.....	2 25
Rhubarb, 211 barrels, at 50 cents.....	105 50
Radishes, 106 bushels, at 50 cents.....	53 00
Spinach, 76 bushels, at 20 cents.....	15 20
Swiss chard, 232 barrels, at 50 cents.....	116 00
Salsify, 37 barrels, at 50 cents.....	18 50
Sage, 50 bunches, at 15 cents.....	7 50
Tomatoes, 757 bushels, at 25 cents.....	189 25

ESTIMATED—NOT HARVESTED

Beans, Lima, 75 bushels, at \$1.....	75 00
Beets, 800 bushels, at 25 cents.....	200 00
Carrots, 200 bushels, at 30 cents.....	60 00
Cabbage, 25,000 heads, at 3 cents.....	750 00
Celery, 12,000 bunches, at 3 cents.....	360 00
Corn, pop, 35 bushels, at 75 cents.....	26 25
Cauliflower, 1,500 heads, at 5 cents.....	75 00
Onions, 150 bushels, at 50 cents.....	75 00
Peppers, 50 bunches, at 75 cents.....	37 50
Parsley, 20 bunches, at 3 cents.....	60
Swiss chard, 110 barrels, at 50 cents.....	55 00
Salsify, 188 barrels, at 50 cents.....	94 00
Tomatoes, 763 bushels, at 25 cents.....	190 75
Turnips, 1,000 bushels, at 25 cents.....	250 00
Wormwood, 50 bunches, at 10 cents.....	5 00
Credit to farm account, rentals, etc.....	127 00

Total farm and garden products..... \$31,884 97

Debit

Amount charged to farm and grounds.....	\$11,049 22
Farm wages and board	5,544 00
All articles of produce used as food for cows, hogs, sheep, fowls, etc.....	4,727 75
Net profit to balance.....	10,564 00
	<hr/>
	\$31,884 97
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FARM STOCK ON HAND SEPTEMBER 30, 1901

Horses	37
Colts	9
Mule	1
Cows	162
Heifers, 2-year old	8
Heifers, 1-year old	26
Heifer calves	12
Bulls	5
Boars	5
Hogs, fat	115
Shoats	30
Pigs	22
Breeding sows	35
Sheep	24
Lambs	11
Turkeys	60
Geese	7
Ducks	30
Fowls	260

ARTICLES MADE IN MATRON'S DEPARTMENT

Aprons, patients'	4,362
Aprons, cooks'	770
Bibs	261
Bath robes	43

Bureau covers	217
Bed protectors	8
Blankets, quilted	18
Basket-ball suits	21
Chemises	1,188
Caps, cooks'	68
Caps, nurses'	385
Curtains, Holland	688
Curtains, cheesecloth	88
Dresses, gingham	1,534
Dresses, calico	953
Dresses, strong gingham	75
Dresses, quilted	26
Dresses, cashmere	24
Dressing jackets	14
Drawers, cotton	377
Drawers, cotton flannel	424
Hash covers	27
Hose, knit	38
Hose bags	41
Laundry bags	36
Laundry squares	43
Mattress ticks	249
Mattresses, knitted	48
Nightgowns.	93
Pillow shams	57
Pillowcases, bleached	133
Pillowcases, unbleached	1,381
Pillowticks.	33
Skirts, cotton	423
Skirts, cotton flannel	311
Skirts, balbriggan	98
Shirt waists	10
Splashers.	30
Sheets, bleached	104
Sheets, unbleached	3,746

Tablecloths, patients'	587
Tablecloths, center	33
Table spreads	45
Napkins.	168
Towels, patients'	13,744
Towels, dish	1,493
Towels, roller	118
Towels, center	178
Suits, union	12
Shrouds.	129
Shroud shirts	5
Vests, cotton flannel.....	433
In addition to the foregoing there have been mended during the year the following number of pieces of clothing and bedding.....	128,975

ARTICLES MADE IN THE TAILORING DEPARTMENT

Bows.....	33
Coats.....	1,307
Coats, kitchen workers'.....	15
Coats, dining-room workers'.....	21
Caps, men's, winter.....	180
Hatbands.....	130
Mittens, cloth, pairs.....	131
Overshirts.....	216
Overalls.....	141
Overcoats.....	99
Pants.....	1,859
Pants, kitchen workers'.....	34
Pants, dining-room workers'.....	117
Straight suits	136
Suspenders, canvas	1,537
Shirts.....	3,425
Vests.....	1,225

MADE IN SHOE SHOP

Brogans, pairs	221
Shoes, fine, pairs.....	93
Slippers, pairs	781

ARTICLES MADE AND REPAIRED IN SHOE SHOP

Awnings, new	15
Awnings repaired	12
Curtains, carriage, repaired.....	5
Cushions, new	2
Carriage mud-wings, covered.....	4
Cushions, upholstered	10
Chairs, upholstered	23
Chair cushions made, new.....	10
Clips in traces.....	24
Cockeyes in traces.....	18
Check lines, pairs.....	2
Cross lines, pairs.....	2
Dashboards, covered	2
Express wagons, covered.....	2
Hame straps, new.....	50
Horse collars faced, new	15
Horse flynets, repaired.....	12
Halters, new	10
Hitching straps, new	8
Laundry sacks repaired.....	43
Mattresses made over.....	1,610
Mattresses, new	10
Martingales, new	16
Neckyoke centers	4
Pillows, made over.....	869
Rugs, ingrain, new.....	75
Team harness, double, new.....	1
Team bridles.....	4

Shoes, pairs, new.....	540
Snaps in harness.....	78
Settees repaired.....	3

All boots, shoes and slippers repaired.

All heavy and light harness repaired.

ARTICLES MADE IN BROOM SHOP

Brooms, house.....	2,703
Brooms, brush	207
Brooms, stable.....	6
Baskets, waste.....	69
Basket, small square	1
Baskets repaired.....	19
Baskets, large square clothes.....	14
Baskets, bread.....	2
Baskets, dressing.....	2
Basket, tool	1
Basket, market	1
Baskets, 18x31x4 inches.....	2
Brushes, horse.....	17
Brushes, scrub.....	434
Brushes, hair.....	55
Brushes, bathing.....	138
Brushes, wall.....	5
Brushes, shoe.....	6
Brushes, cow.....	26
Brushes, round.....	6
Chairs caned	157
Clothes hampers	15
Door mats.....	60
Settees, reseated.....	3

ARTICLES MADE IN THE TIN SHOP

Basins, 2-quart	2
Basins, wash	49
Boiler, 4x tin, copper bottom.....	1
Boxes, food, covered.....	33
Boxes, application cards, covered.....	3
Box, bread, covered	1
Can, galvanized, 60-gallon.....	1
Cans, catsup	6
Cans, soup	6
Cans, milk, 20-quart.....	5
Cans, syrup	2
Cans, oil, 2-gallon.....	2
Chambers, 2x tin, copper bottom.....	78
Coolers, water, made over.....	11
Covers, kettle	15
Cups, copper, bird-feed.....	3
Cups, small, drinking.....	168
Colanders, large, 4x tin	2
Carnation supports, wire.....	125
Dampers, pipe	3
Dippers, 2x tin, 1-pint.....	28
Dippers, 4x tin, 1 quart.....	24
Dippers, 4x tin, 2-quart.....	12
Dippers, 4x tin, 4-quart.....	2
Dippers, 4x tin (strainer).....	6
Elbows	11
Exhaust head, galvanized iron.....	1
Fumigators	3
Finials, galvanized iron.....	2
Hood and stack for engine house.....	1
Holder, spit cup.....	18
Hods, coal	12
Kettles, tea, 4x tin, copper bottoms.....	2
Kettle, 4x tin, 12-quart.....	1
Kettle, copper	1

Lining bathroom, galvanized iron.....	1
Lining flushing tanks, copper.....	8
Pail, 4x tin, 2-quart, covered.....	1
Pails, 4x tin, 4-quart.....	2
Pails, 4x tin, 3-quart, covered.....	3
Pails, 1x tin, covered, 6-quart.....	6
Pail, cream, 4x tin, 5-gallon.....	1
Pails, 4x tin, hoop on bottom.....	54
Pails, No. 24 galvanized, hoop on bottom.....	76
Pans, 4x tin, 6-quart.....	67
Pans, 4x tin, 10-quart.....	48
Pans, 4x tin, 21-quart.....	54
Pans, 4x tin, 15-quart.....	14
Pans, dripping, No. 22, R. G. iron.....	13
Pans, bread, No. 24, planished.....	48
Pans, dust, 3x tin.....	72
Pans, cake, 4x tin.....	13
Pans, roasting, covered.....	2
Pans, 4x tin, 20-gallon, iron staps on bottom.....	3
Pitchers, 4x tin.....	30
Pipe joints.....	39
Potato strainers, 4x tin.....	15
Pipe flashings, galvanized.....	7
Pots, coffee, 4x tin.....	6
Pots, tea, 4x tin.....	7
Refrigerator linings.....	3
Steam sterilizer, copper bottom.....	1
Sprinkler, galvanized, 12-quart.....	1
Sprinkler heads.....	4
Strainer head for water pipe.....	1
Skimmers.....	8
Spring bottom oilers.....	6
Spark arrestors for engine.....	2
Sieves, flour.....	6
Sprays for coffee urns.....	2
Safes, floor, tin.....	3

Squirrel cage	1
Slop jars, galvanized.....	6
Tins, bread	34
Tins, pie	207
Tins, compartment	7
Tins, diet	18
Torches, plumbers and steam fitter's.....	9
Vegetable spoons	24

MAINTENANCE

	Total cost	Weekly per capita
Officers' salaries	\$20,289 89	\$0.172
Wages	129,313 94	1.102
Provisions and stores	110,292 97	.940
Ordinary repairs	8,262 58	.071
Farm and grounds.....	11,297 60	.096
Clothing	22,834 04	.181
Furniture and bedding.....	8,111 92	.069
Books and stationery.....	2,692 28	.023
Fuel and light.....	29,733 82	.254
Medical supplies	3,016 52	.025
Miscellaneous expenses	10,315 09	.088
Transportation of patients.....	4,589 85	.039
<hr/>		
Total estimates 1-12 inclusive as above	\$360,750 50	\$3.060

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1901.....	1,122	1,144	2,266
Admitted during year ending Sept. 30, 1901 ...	155	122	277
On original commitments:			
From residences	140	108	248
By transfers from county houses.....	7	8	15
By transfers from other institutions for insane.	8	6	14
Total number under treatment during year.	1,277	1,266	2,543
Daily average population	1,119	1,137	2,256
Capacity of institution	1,136	1,169	2,305
Discharged during the year:			
As recovered.....	27	27	54
As improved.....	21	36	57
As unimproved.....	15	7	22
As not insane	1	.....	1
Died	83	90	173
Whole number discharged during the year.....	147	160	307
Remaining October 1, 1901	1,130	1,106	2,236

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening.....	1869
Total acreage of grounds and buildings.....	1,107
Value of real estate, including buildings.....	\$1,396,243 50
Value of personal property.....	211,353 51
Acreage under cultivation.....	650

Receipts during year, maintenance fund:

Balance on hand October 1, 1900.	\$442 21
From State Treasurer for maintenance on estimates	
1 to 12 inclusive	335,110 00
From private patients.....	448 14
From reimbursing patients.	20,705 20
From all other sources	8,652 87

Total receipts for maintenance..... \$385,358 12

Total receipts from State Commission in Lunacy
for extraordinary improvements.....

\$20,951 75

Disbursements during the year for maintenance:

Estimate No. 1. For officers' salaries	\$20,289 89
Estimate No. 2. For wages	129,313 94
Estimate No. 3. For provisions and stores.....	110,292 97
Estimate No. 4. For ordinary repairs.....	8,262 58
Estimate No. 5. For farm and grounds.....	11,297 60
Estimate No. 6. For clothing	22,834 04
Estimate No. 7. For furniture and bedding	8,111 92
Estimate No. 8. For books and stationery	2,692 28
Estimate No. 9. For fuel and light	29,733 82
Estimate No. 10. For medical supplies	3,016 52
Estimate No. 11. For miscellaneous expenses....	10,315 09
Estimate No. 12. For transportation.....	4,589 85

Total disbursements, estimates 1 to 12 in-
clusive.....

\$360,750 50

Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy	\$20,951 75
Remitted to State Treasurer, sundry receipts, Chap. 580, Laws 1899	18,854 35
Balances October 1, 1901:	
General maintenance fund	2,867 68
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive	3 06
Maximum rate of wages paid attendants:	
Men	33 per month
Women	28 per month
Minimum rate of wages paid attendants:	
Men	20 per month
Women	14 per month
Proportion of day attendants to average daily population	1 to 11.06
Proportion of night attendants to average daily population	1 to 64.46
Percentage of daily patient population engaged in some kind of useful occupation	51.52
Estimated value of farm and garden products during year	\$31,757 97
Estimated value of articles made or manufactured by patients during year	20,387 17
Received from State Treasurer for March maintenance, account of bank failure	18,136 03
Disbursements for deferred March vouchers, account of bank failure	18,136 03

The above balance of \$2,885.59 is balance in the banking house of L. C. Partridge at the time of its assignment on April 25, as shown by the check book of the treasurer, and consists of the balance on hand as of April 1, had all checks been paid, and the receipts of the month from reimbursing patients added to the amount of unpaid checks of \$18,136.03, making a total of \$21,021.62 as the claim of the hospital against the bank.

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.)	7	16	23	3	6	9	4
Mental strain, worry and overwork (not included in above)	6	8	14	.....	2	2	.....
Religious excitement . .	1	3	4	.....	2	2	1
Love affairs (including seduction) . . . . .	.....	2	2	.....	1	1	.....
Fright and nervous shock	1	1	2	.....	1	1	.....
Physical:							
Intemperance	19	2	21	.....	6	6	8
Sexual excess	2	.....	2	.....	1	1	.....
Venereal diseases	7	1	8	2	.....	2	1
Masturbation	8	1	9	3	.....	3	3
Sunstroke	2	1	3	2	.....	2	.....
Accident or injury	4	.....	4	.....	.....	.....	.....
Pregnancy . . . . .	.....	5	5	.....	.....	.....	.....
Parturition and puerperium . . . . .	.....	1	1	.....	1	1	.....
Change of life . . . . .	.....	17	17	.....	5	5	.....
Fevers	2	1	3	.....	.....	.....	.....
Privation and overwork . .	4	4	8	.....	.....	.....	.....
Epilepsy	2	2	4	1	2	3	.....
Diseases of skull and brain	5	.....	5	1	.....	1	.....
Old age	13	4	17	1	3	4	4
Exophthalmic goitre . . . .	.....	1	1	.....	.....	.....	.....
Epidemic influenza	5	3	8	3	2	5	.....
Abuse of drugs	3	3	6	.....	.....	.....	.....
Loss of special sense . .	1	.....	1	.....	.....	.....	.....
All other bodily disorders and ill health . .	5	13	18	1	6	7	.....

Table No. 3—(Concluded)

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Heredity.....	19	23	42	19	23	42	....
Congenital defect.....	2	1	3	.....	.....	.....	.....
Unascertained.....	36	9	45	5	2	7	12
Not insane.....	1	.....	1	.....	.....	.....	.....
Total.....	155	122	277	41	63	104	33

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious...	1	1	1	4	1	3
Mania, acute.....	32	16	6	556	245	72
Mania, recurrent.....	2	.....	.....	71	24	13
Mania, chronic.....	32	2	23	554	25	289
Melancholia, acute.....	59	34	9	843	309	166
Melancholia, simple.....	.....	.....	1	.....	.....	1
Melancholia, chronic.....	81	1	29	618	32	157
Alternating (circular) insanity.....	1	.....	.....	4	.....	.....
General paralysis.....	17	.....	10	164	.....	133
Dementia, primary.....	2	.....	4	9	.....	4
Dementia, terminal.....	49	.....	78	1,677	.....	975
Epilepsy with insanity.....	.....	.....	10	183	.....	166
Imbecility with manical attacks.....	.....	.....	2	99	.....	20
Idiocy.....	.....	.....	.....	37	.....	15
Not insane*.....	1	.....	.....	19	.....	.....
Total.....	277	54	173	4,838	636	2,014

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6
Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	6	7	13	1	1	2	114	93	207	3	2	5
One to three months	6	8	14	7	2	9	71	87	158	55	21	76
Three to six months	3	6	9	9	10	19	48	55	103	115	91	206
Six to nine months	1	3	4	5	2	7	16	19	35	52	60	112
Nine months to one year .....	.....	.....	.....	1	5	6	7	11	18	35	52	87
One year to eighteen months ..	1	2	3	3	5	8	14	9	23	40	41	81
Eighteen months to two years ..	.....	.....	.....	1	1	2	10	9	19	8	12	20
Two to three years .....	.....	1	1	.....	1	1	11	9	20	10	20	30
Three to four years	3	.....	3	.....	.....	.....	6	2	8	2	6	8
Four to five years .....	.....	.....	.....	.....	.....	.....	.....	3	3	3	1	4
Five to ten years .....	.....	.....	.....	.....	.....	.....	4	6	10	3	3	6
Ten to twenty years .....	.....	.....	.....	.....	.....	.....	2	2	4	.....	1	1
Not insane .....	.....	.....	.....	.....	.....	.....	2	.....	2	2	.....	2
Unascertained	7	.....	7	.....	.....	.....	23	5	27	.....	.....	.....
Total	27	27	54	27	27	54	328	310	638	328	310	638

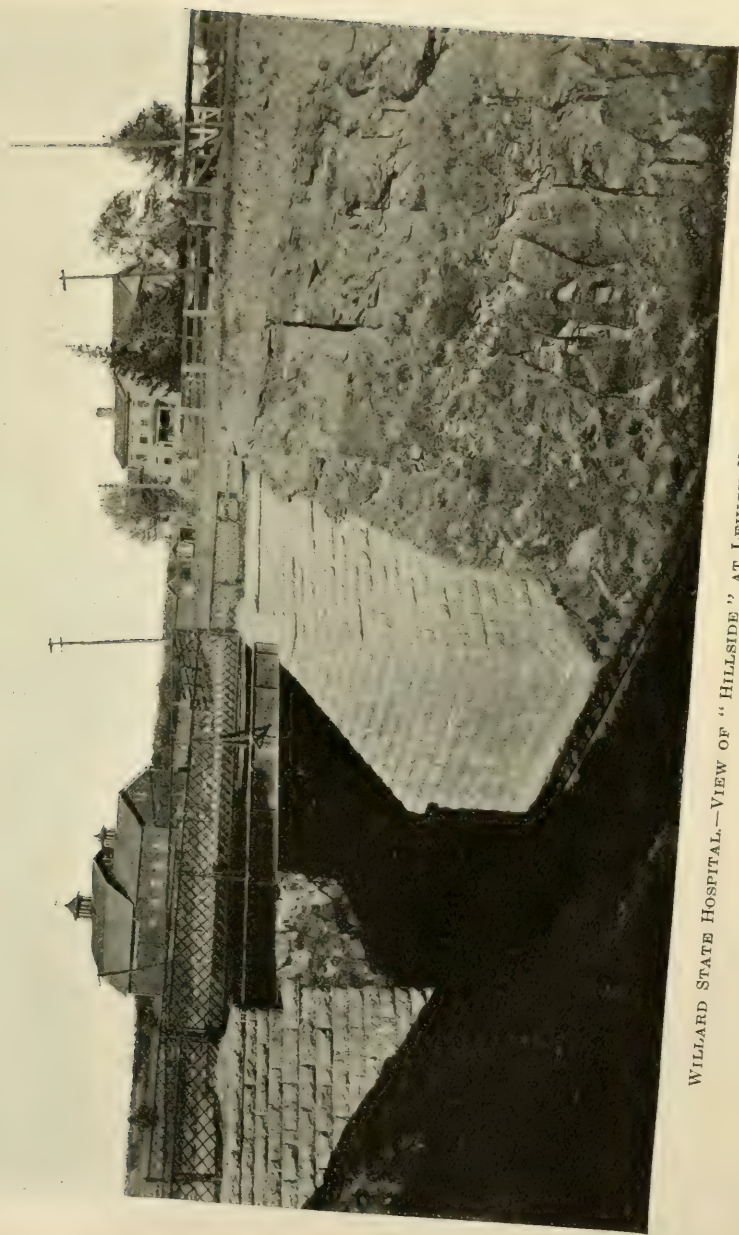
TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

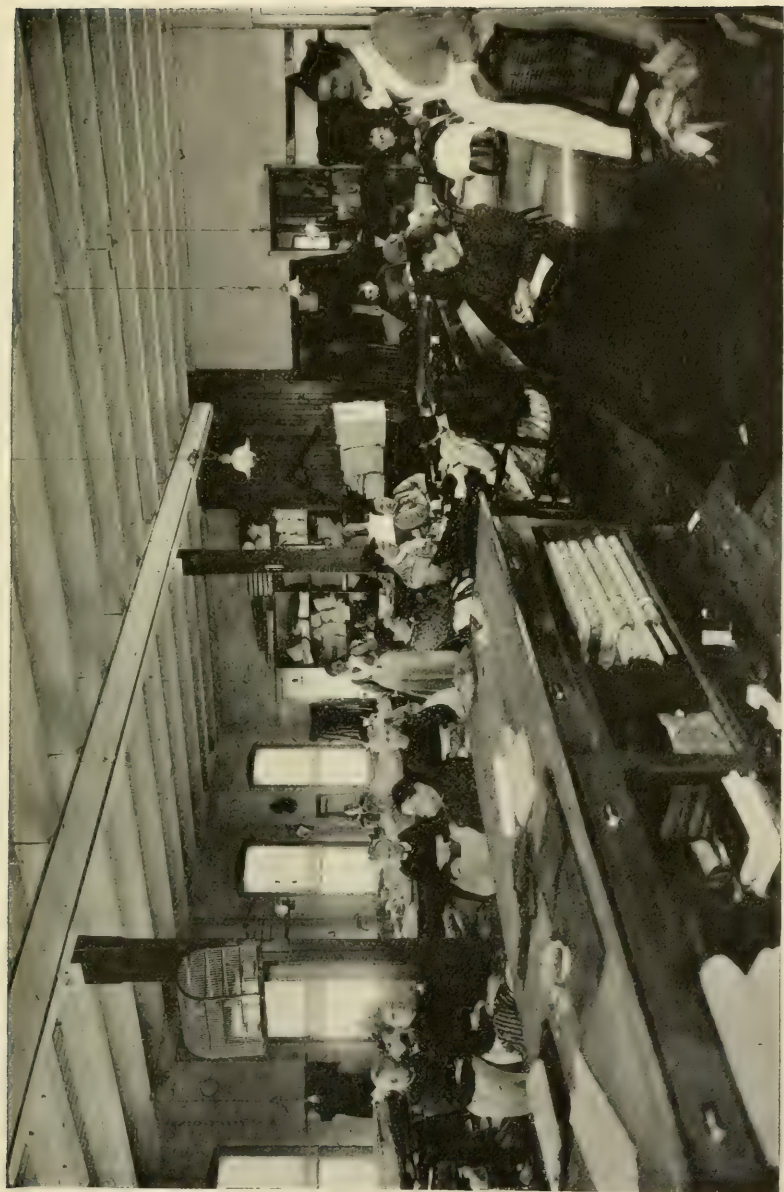
CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases :						
Typhoid fever.....		1	1	3	6	9
Measles	2		2	2		2
Influenza				1	5	6
Erysipelas.....	1		1	5	9	14
Septicemia and pyemia.....		1	1	8	6	14
Dysentery				9	11	20
Tuberculosis	16	16	32	168	247	415
Constitutional diseases :						
Rheumatism (or rheumatic affections)					1	1
Diabetes mellitus and diabetes insipidus				1	1	2
Scurvey, purpura and haemophilia.....					1	1
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and œsophagus				3		3
Diseases of the stomach				2	3	5
Diseases of the intestines..	1	7	8	40	66	106
Diseases of the liver	1	1	2	4	3	7
Diseases of the peritoneum.		3	3	11	12	23
Diseases of the respiratory system :						
Diseases of the bronchi.....				5	1	6
Diseases of the lungs.....	17	25	42	149	157	306
Diseases of the pleura.....				2	2	4
Diseases of the circulatory system :						
Diseases of the pericardium.....				2	2	4
Diseases of the heart.....	16	17	33	126	125	351
Aneurism.....				2	1	3
Diseases of the blood and ductless glands :						
Anemia, pernicious anemia and leukæmia.....				1	4	5
Exophthalmic goitre.....		1	1		1	1
Diseases of the genito-urinary system.....	8	3	11	84	54	138

Table No. 7—(Concluded)

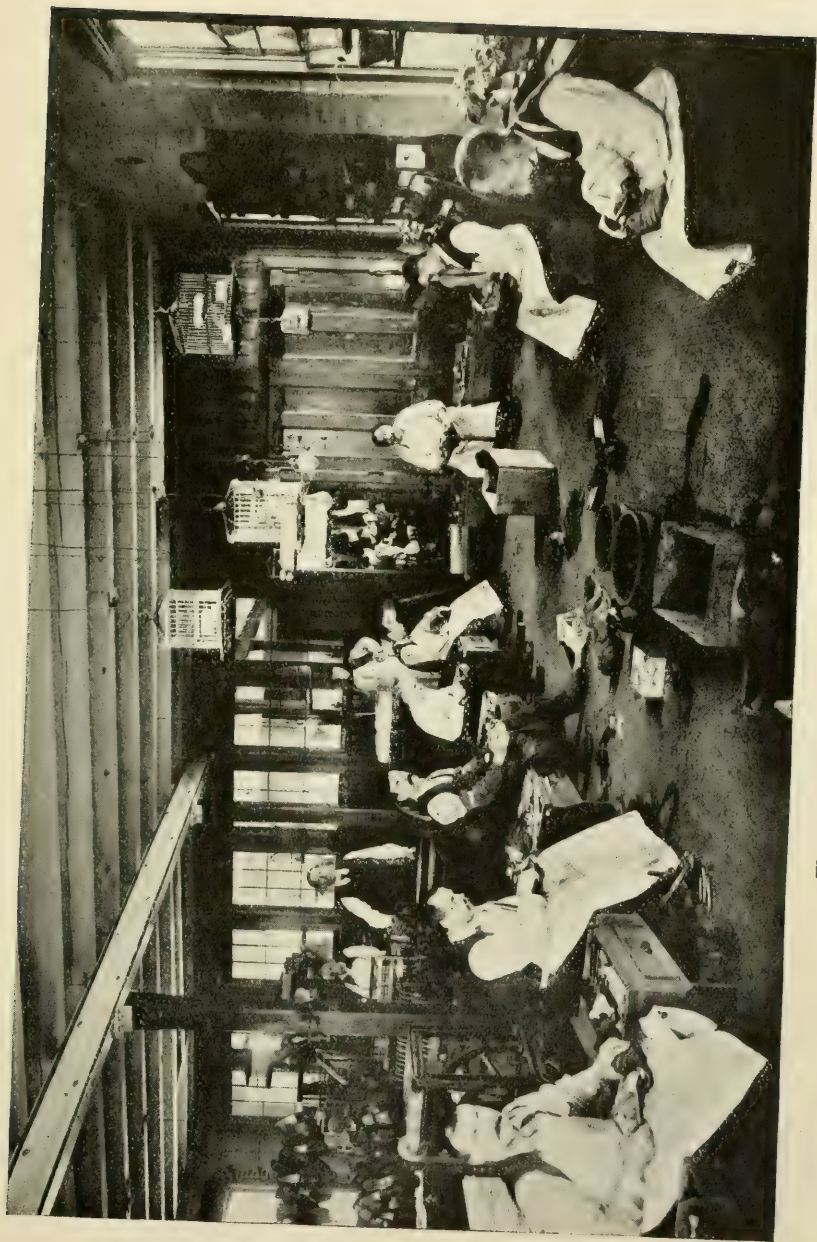
CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the nervous system :						
Diseases of the spinal cord .	1	.....	1	5	.....	5
Diseases of the meninges ..	1	1	2	6	7	13
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions)	6	6	12	62	92	154
Epilepsy .....	.....	1	1	45	38	83
Mental diseases :						
Exhaustion of acute mental disease	1	.....	1	67	71	138
Exhaustion of chronic mental disease						
General paralysis of the insane	6	2	8	106	22	128
The intoxications; heat-stroke; obesity :						
Heat-stroke .....	.....	.....	.....	.....	1	1
Debility of old age .....	.....	.....	.....	26	43	69
Accident	1	.....	1	8	3	11
Suicide	1	1	2	5	3	8
Surgical and gynecological diseases and diseases of the skin.						
Malignant new growths of cancer	1	.....	1	7	4	11
	3	4	7	14	33	47
Total	83	90	173	989	1,035	2,014



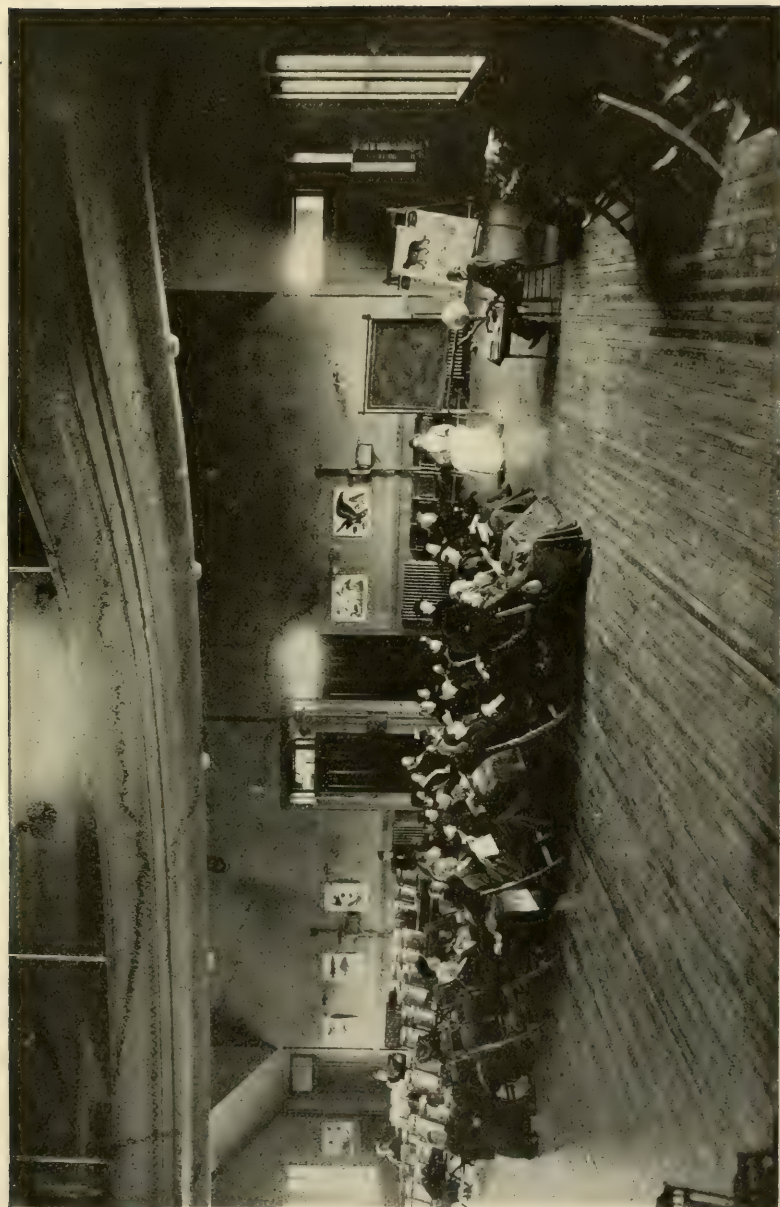
WILLARD STATE HOSPITAL.—VIEW OF "HILLSIDE" AT LEHIGH VALLEY RAILROAD CROSSING.



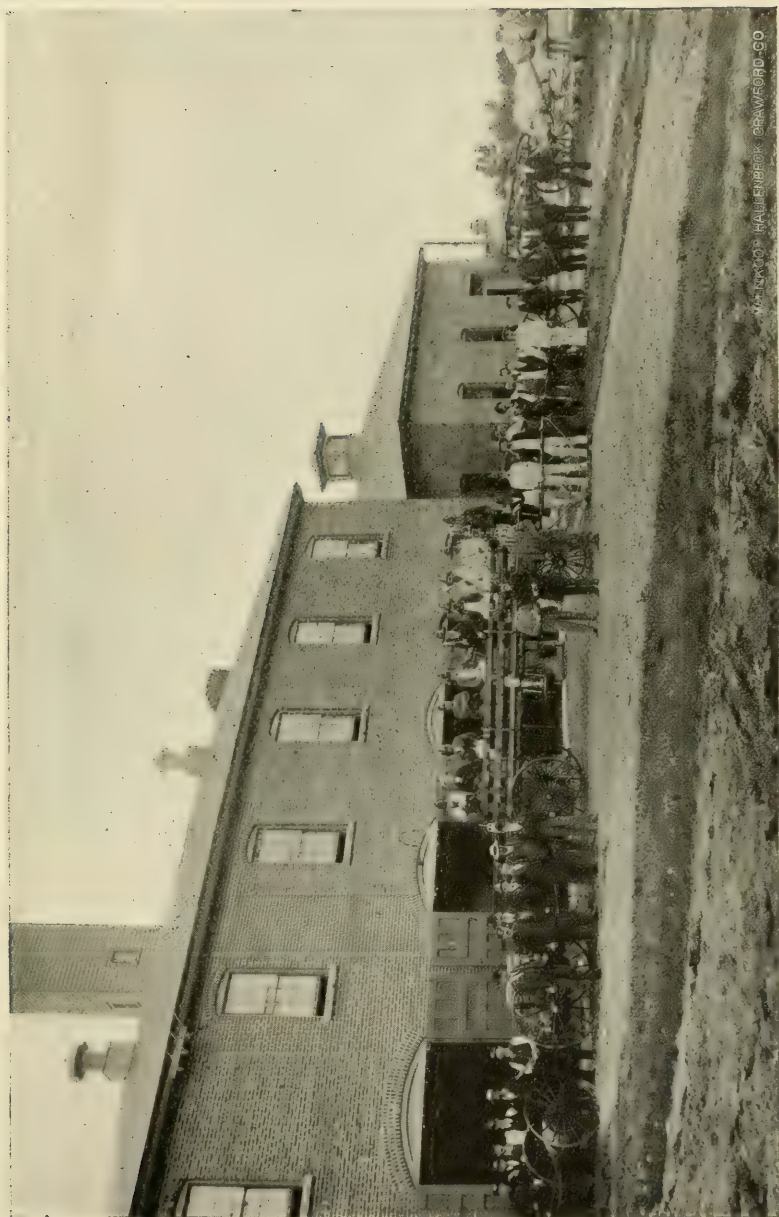
WILLARD STATE HOSPITAL.—SEWING ROOM.



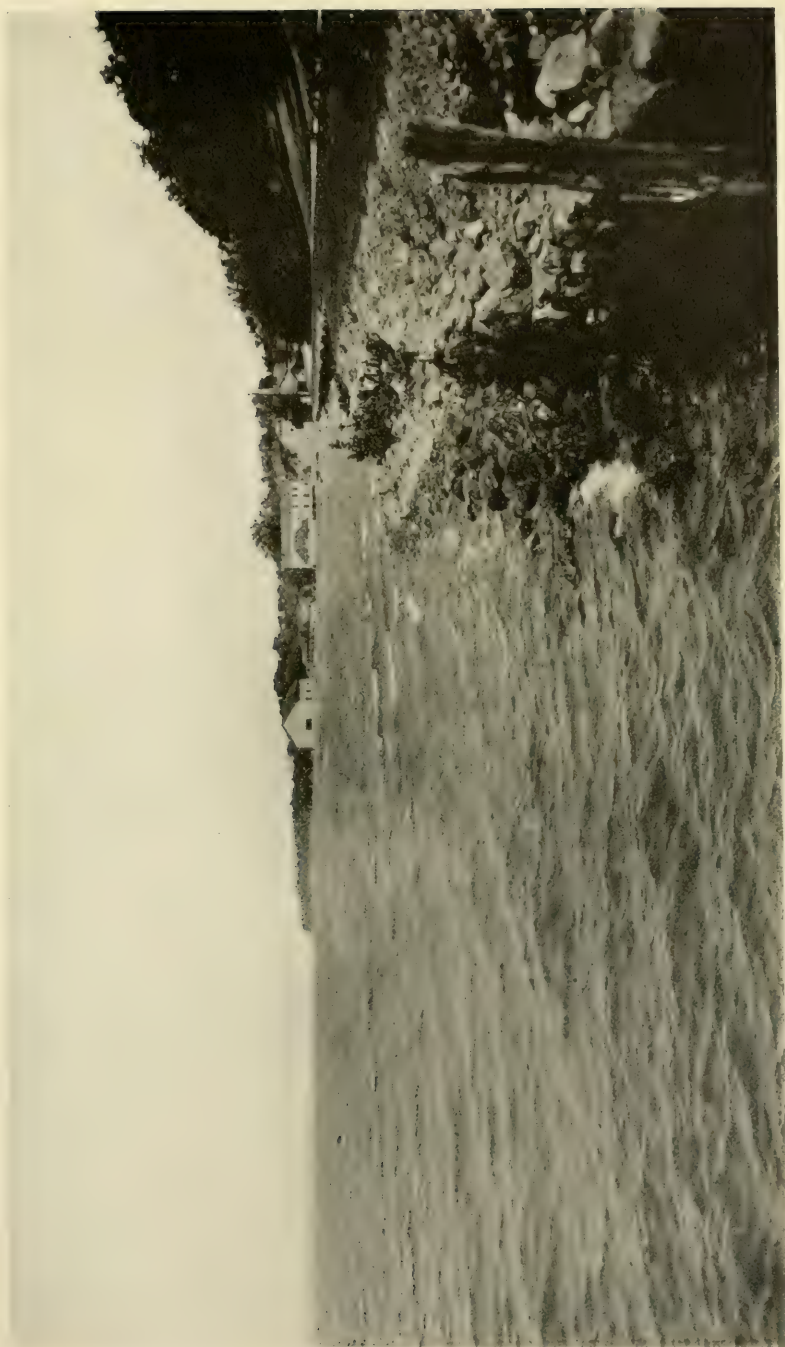
WILLARD STATE HOSPITAL.—SHOEMAKER'S SHOP.



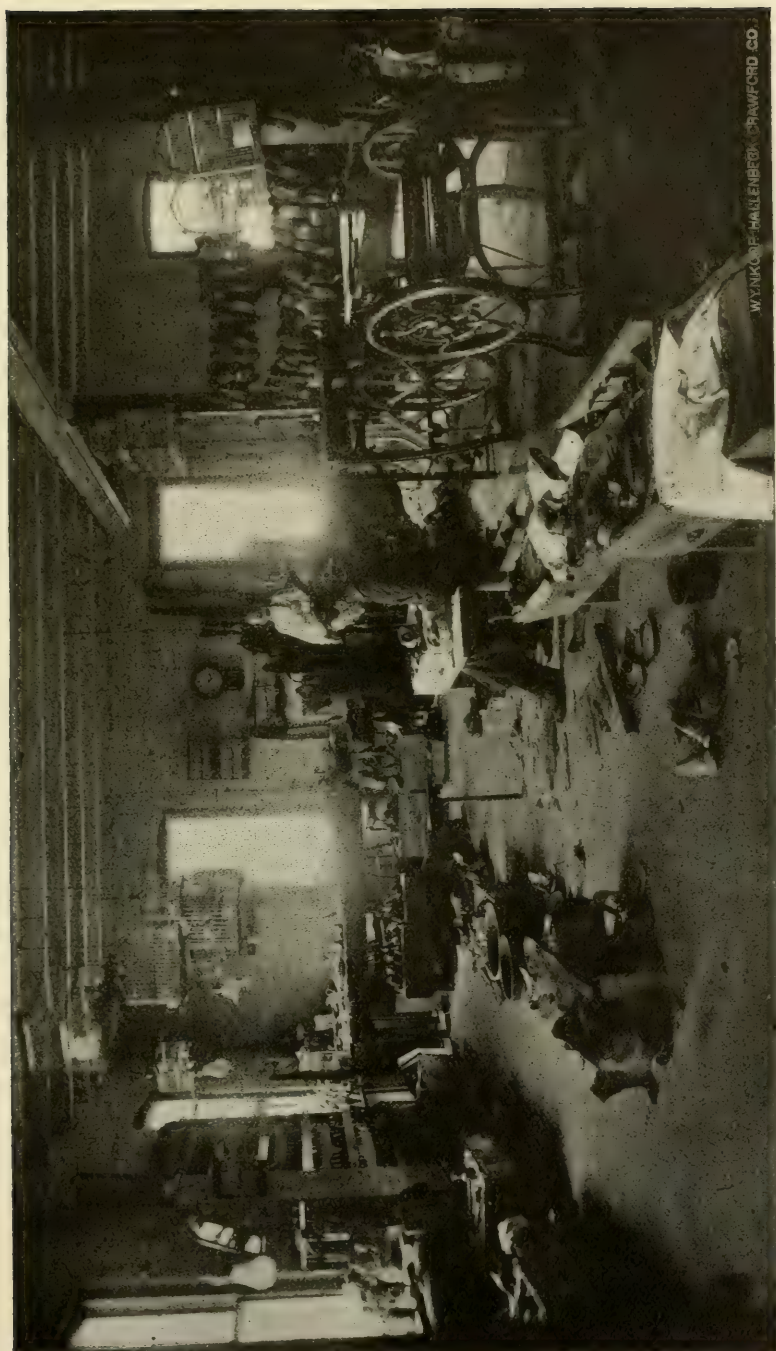
WILLARD STATE HOSPITAL.—SCHOOL FOR PATIENTS.



WILLARD STATE HOSPITAL.—FIRE COMPANY AND FIRE ENGINE HOUSE.

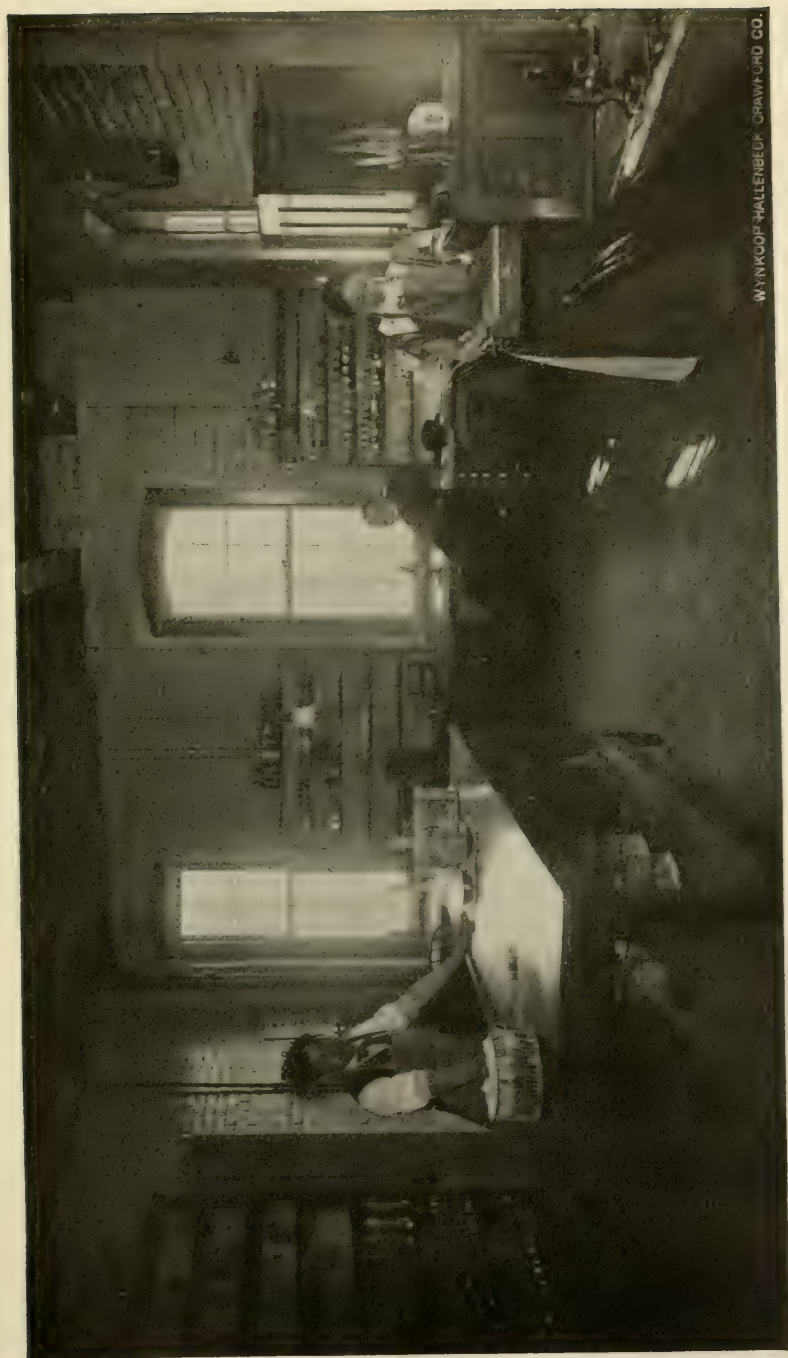


WILLARD STATE HOSPITAL.—LAKE VIEW IN FRONT OF HOSPITAL.



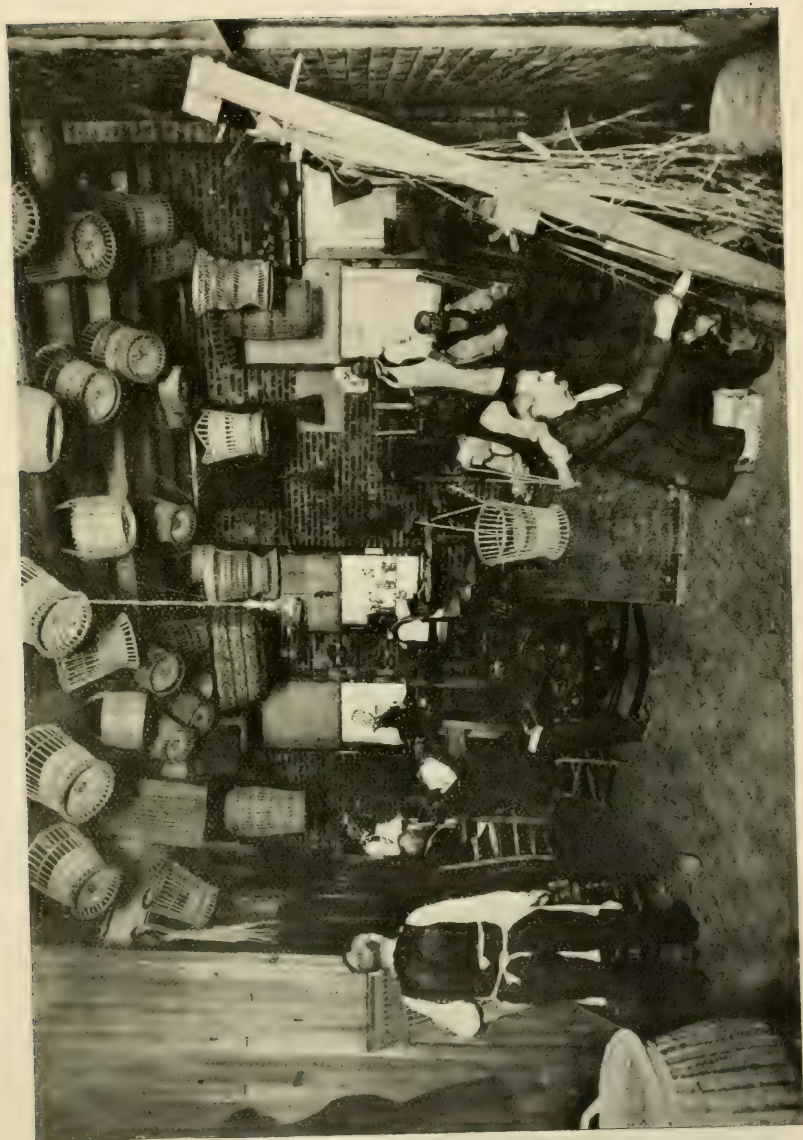
WYNKOPF, HALENBERG & SPAWFORD CO.

WILLARD STATE HOSPITAL.—INTERIOR OF SHOE-SHOP.



WYNKOP-HALLEBECK CRAWFORD CO.

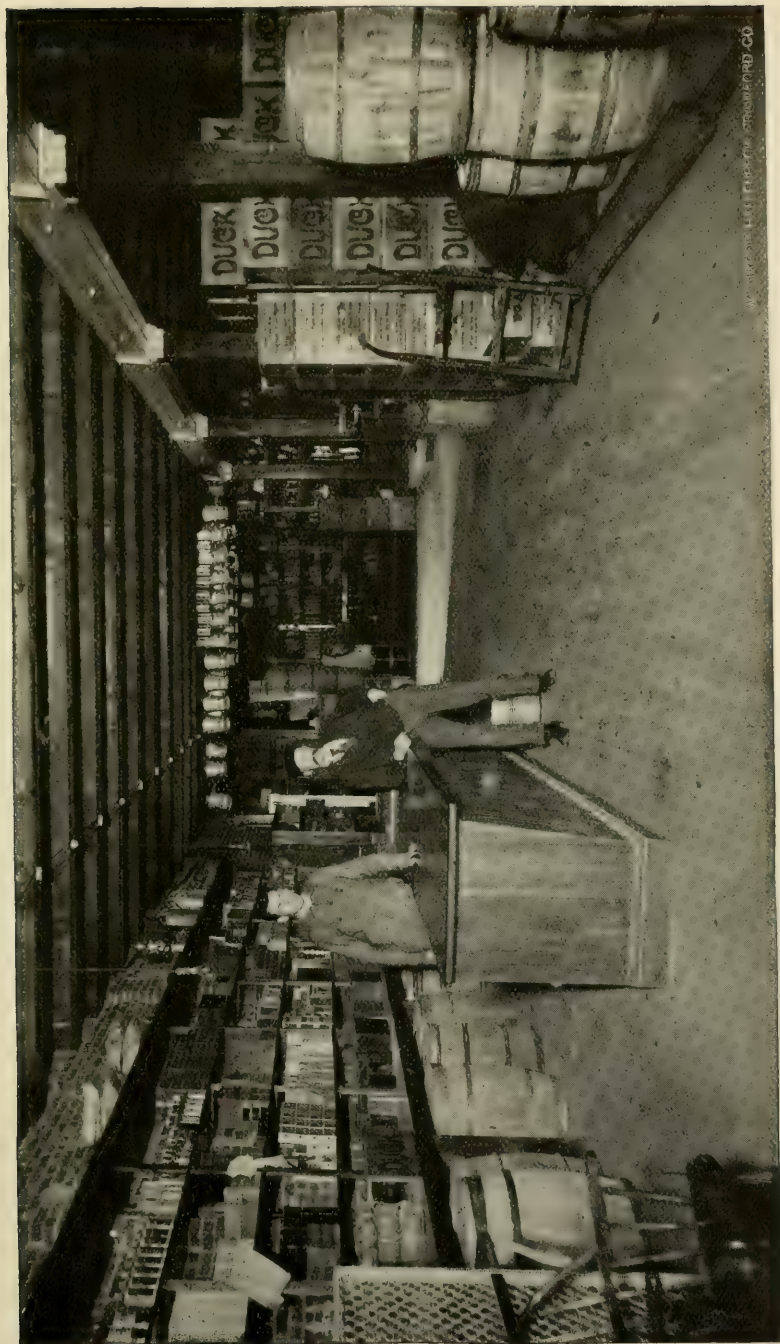
WILLARD STATE HOSPITAL.—INTERIOR OF LABORATORY.



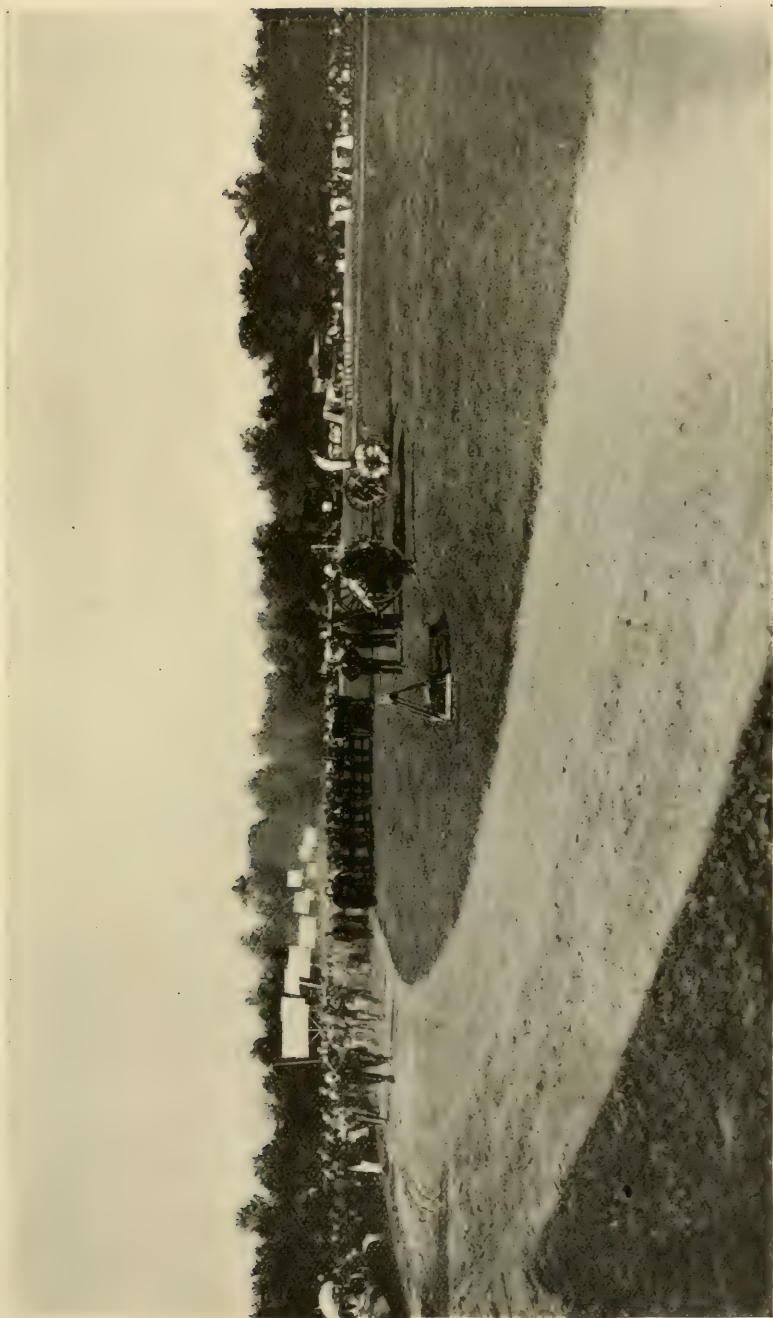
WILLARD STATE HOSPITAL.—BASKET, MAT AND BRUSH SHOP.



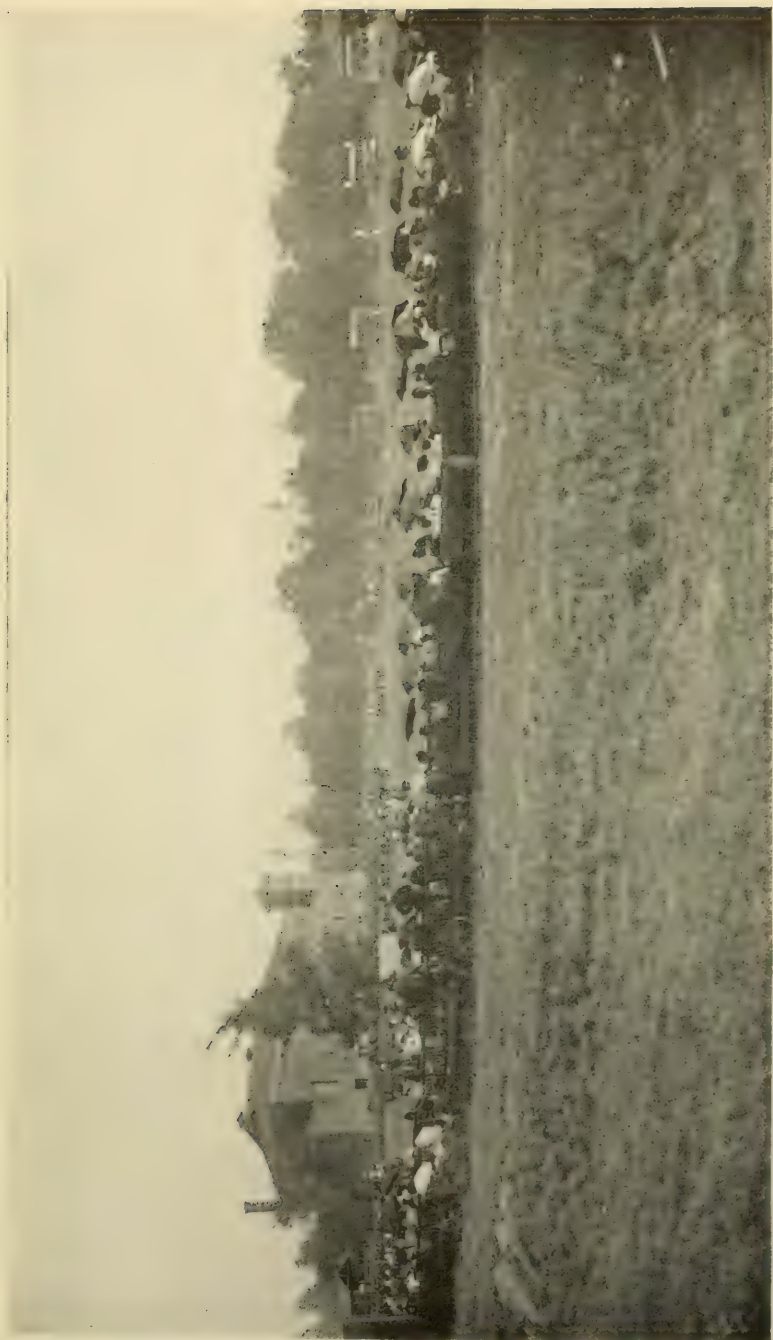
WILLARD STATE HOSPITAL.—LAUNDRY.



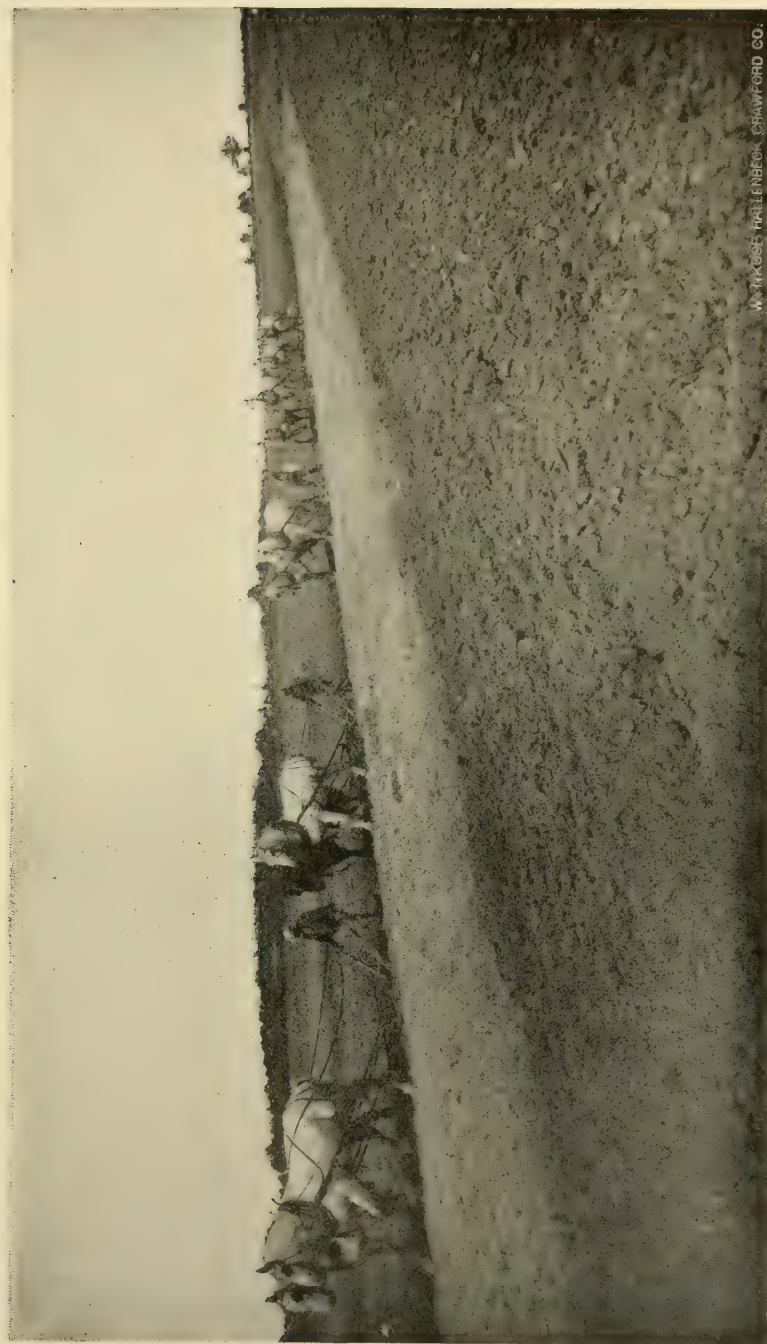
WILLARD STATE HOSPITAL.—STOREROOM.



WILLARD STATE HOSPITAL.—PARADE OF WORKING PATIENTS ON FIELD DAY.



WILLARD STATE HOSPITAL.—FIELD DAY.



W. T. K. G. H. L. L. N. B. E. C. C. H. A. W. F. O. R. D. C. O.

WILLARD STATE HOSPITAL.—FALL PLOWING.

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	12	11	23	156	180	336
Maternal branch.....	13	19	32	212	262	474
Paternal and maternal branches.....		2	2	20	47	67
Collateral branches.....	26	24	50	272	265	537
No hereditary tendency..	74	60	134	883	735	1,618
Unascertained.....	30	6	36	893	913	1,806
Total.....	155	122	277	2,436	2,402	4,838

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single..	61	38	99	1,213	903	2,116
Married.....	69	60	129	918	1,025	1,943
Widowed...	17	21	38	237	427	664
Divorced.....	4	3	7	27	17	44
Unascertained.....	4	.....	4	41	30	71
Total.....	155	122	277	2,436	2,402	4,838

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	5	2	7	44	13	57
Academic	10	9	19	144	146	290
Common school	116	97	218	1,498	1,416	2,914
Read and write	1	3	4	81	43	124
Read only	3	4	7	107	143	250
No education	5	7	12	165	155	320
Unascertained	15	.....	15	397	486	883
Total	155	122	277	2,436	2,402	4,838

TABLE No. 11
Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901				SINCE OCTOBER 1, 1888			
	DURATION PREVIOUS TO ADMISSION		PERIOD UNDER TREATMENT		DURATION PREVIOUS TO ADMISSION		PERIOD UNDER TREATMENT	
	Men	Women	Total		Men	Women	Total	
Under one month	3	6	9		56	51	107	
One to three months	4	5	9		53	55	108	
Three to six months	8	5	13		60	38	98	
Six to nine months	5	3	8		59	39	98	
Nine months to one year	2	1	3		25	25	50	
One year to eighteen months ..	6	3	9		64	48	112	
Eighteen months to two years ..	2	2	4		24	24	48	
Two to three years	9	3	12		101	79	180	
Three to four years	11	6	17		65	73	138	
Four to six years	9	11	20		76	87	163	
Six to ten years	5	7	12		77	101	178	
Ten to twenty years	2	8	10		84	121	205	
Twenty years and over	6	6	12		53	73	126	
Unascertained	11	24	35		182	221	403	
Total	83	90	173		979	1,035	2,014	
Average duration of insane life (giving years and tenths)	6.06		7.0	6.8	5.2		6.6	5.9

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years					1	1
From 10 to 15 years				10	4	14
From 15 to 20 years	9	3	12	84	45	129
From 20 to 25 years	5	10	15	180	125	305
From 25 to 30 years	8	15	23	205	197	402
From 30 to 35 years	14	8	22	235	231	466
From 35 to 40 years	10	14	24	262	257	519
From 40 to 50 years	39	31	70	497	584	1,081
From 50 to 60 years	29	18	47	434	442	876
From 60 to 70 years	24	9	33	283	292	575
From 70 to 80 years	15	11	26	195	183	378
From 80 to 90 years	2	3	5	49	40	89
Unascertained				2	1	3
Total	155	122	277	2,436	2,402	4,838

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years					1	1
From 10 to 20 years	1		1	23	18	41
From 20 to 30 years	5	7	12	85	90	175
From 30 to 40 years	4	8	12	67	93	160
From 40 to 50 years	6	9	15	70	64	134
From 50 to 60 years	6	1	7	57	30	87
From 60 to 70 years	5	2	7	21	11	32
From 70 to 80 years				3	3	6
Total	27	27	54	326	310	636

TABLE No. 14

Showing ages of patients who died during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years.....	2	2	4	6	3	9
From 20 to 25 years.....	2	1	3	22	14	36
From 25 to 30 years.....	4	2	6	40	32	72
From 30 to 35 years.....	1	1	2	46	45	91
From 35 to 40 years.....	5	6	11	80	60	140
From 40 to 50 years.....	6	14	20	152	192	344
From 50 to 60 years.....	18	15	33	201	219	420
From 60 to 70 years.....	20	25	45	180	216	396
From 70 to 80 years.....	16	18	34	185	187	372
From 80 to 90 years.....	8	5	13	64	60	124
Over 90 years	1	1	2	3	7	10
Total	83	90	173	979	1,035	2,014

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month.....	15	15	30
One to three months	22	22	44
Three to six months	24	23	47
Six to nine months	5	7	12
Nine months to one year	8	4	12
One year to eighteen months.....	11	5	16
Eighteen months to two years	10	.....	10
Two to three years	8	10	18
Three to four years	10	5	15
Four to five years	3	9	12
Five to ten years	8	12	20
Ten to fifteen years.....	5	5	10
Fifteen to twenty years	3	1	4
Twenty to thirty years.....	4	3	7
Unascertained	19	1	20
Total	155	122	277

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	12	8	20
One to three months	36	22	58
Three to six months	20	15	35
Six to nine months	20	15	35
Nine months to one year	18	28	46
One year to eighteen months	37	33	70
Eighteen months to two years	48	29	77
Two to three years	39	68	107
Three to four years	162	146	308
Four to five years	94	51	145
Five to ten years	309	336	645
Ten to fifteen years	130	110	240
Fifteen to twenty years	62	81	143
Twenty to thirty years	133	133	266
Thirty years and upwards	10	31	41
Total	1,130	1,106	2,236

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, etc.	7	.....	7	71	7	78
Commercial:						
Bankers, merchants, ac- countants, clerks, sales- men, shopkeepers, shop- men, stenographers, typewriters, etc.	10	.....	10	203	4	207

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Agricultural and pas- toral:						
Farmers, gardeners, herds- men, etc.	51	.....	51	677	2	679
Mechanics at out- door vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc.	26	.....	26	402	....	402
Mechanics, etc., at se- dentary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.	17	.....	17	161	1	162
Domestic service:						
Waiters, cooks, servants, etc. ....	.....	18	18	24	1,160	1,184
Educational and high- er domestic duties:						
Governesses, teachers, stu- dents, housekeepers, nurses, etc. ....	.....	94	94	43	908	951
Commercial:						
Shopkeepers, saleswomen, stenographers, type- writers, etc. ....	.....	3	3	.....	13	13
Employed in seden- tary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, etc. ....	.....	4	4	11	112	123
Miners, seamen, etc.	1	.....	1	27	.....	27
Prostitutes	.....	.....	.....	.....	1	1
Laborers	33	.....	33	636	.....	636
No occupation	8	3	11	142	145	287
Unascertained	2	.....	2	39	49	88
Total	155	122	277	2,436	2,402	4,838

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
California				2	1	3
Connecticut				14	8	22
Florida					2	2
Georgia					1	1
Illinois		1	1	5	3	8
Indiana				1	4	5
Iowa		1	1	2	1	3
Kansas					2	2
Kentucky					3	3
Maine				2	2	4
Maryland				5	56	61
Massachusetts	1		1	17	8	25
Michigan	1	1	2	14	8	22
Minnesota		1	1	1	4	5
Mississippi				1	..	1
Missouri				1	1	2
New Hampshire				3	2	5
New Jersey	2	1	3	12	9	21
New York	85	83	168	1,359	1,285	2,644
North Carolina				2	2	4
Ohio		1	1	4	2	6
Pennsylvania	6	5	11	62	48	110
Rhode Island	1		1	3	....	3
South Carolina				1	1	2
Tennessee				1	....	1
Texas				1	....	1
Vermont				11	6	17
Virginia	1	3	4	3	7	10
Wisconsin				2	6	8
Africa				1	....	1
Armenia				1	....	1
Austria				5	3	8
Bavaria				1	....	1
Bohemia				1	2	3
Canada	3	2	5	31	35	66
Denmark				1	3	4
England	3	3	6	73	75	148
France				15	5	20
Germany	2	9	11	169	187	356
Greece .....				....	1	1

Table No. 18—(Concluded)

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Holland.....	1	.....	1	4	9	13
Hungary.....	1	.....	1	5	3	8
Ireland.....	4	8	12	245	411	656
Italy.....	1	.....	1	17	7	24
Malta.....	.....	.....	.....	1	.....	1
Norway.....	.....	.....	.....	1	.....	1
Poland.....	.....	.....	.....	6	14	20
Russia.....	.....	.....	.....	7	1	8
Scotland.....	.....	1	1	10	14	24
Sicily.....	.....	.....	.....	1	.....	1
Sweden.....	1	.....	1	10	7	17
Switzerland.....	.....	.....	.....	11	1	12
Wales.....	.....	.....	.....	.....	2	2
United States.....	36	2	38	105	13	118
Nova Scotia.....	.....	.....	.....	1	.....	1
Unascertained.....	6	.....	6	185	137	322
Total.....	155	122	277	2,436	2,402	4,838

Of the total number admitted since the 1st of October, 1883, the parents of 44 per cent were both of foreign birth.

In 3 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 6 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

The records in this hospital prior to 1890 do not show the statistics required.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany			
Allegany	24		24
Broome			
Cattaraugus			
Cayuga	30		30
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland	1		1
Delaware			
Dutchess			
Erie	2		2
Essex			
Franklin			
Fulton			
Genesee	12		12
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings			
Lewis			
Livingston			
Madison			
Monroe	2		2
Montgomery			
Nassau			
New York			
Niagara			
Oneida	1		1
Onondaga	2		2
Ontario	35		35
Orange			
Orleans	10		10
Oswego			
Otsego			
Putnam			
Queens			
Rensselaer			
Richmond			
Rockland			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
St. Lawrence.....			
Saratoga.....			
Schenectady.....			
Schoharie.....			
Schuyler.....	12		12
Seneca.....	18		18
Steuben.....	49		49
Suffolk.....			
Sullivan.....			
Tioga.....			
Tompkins.....	25		25
Ulster.....			
Warren.....			
Washington.....			
Wayne.....	31		31
Westchester.....	1		1
Wyoming.....			
Yates.....	16		16
Soldiers' Home.....	6		6
Total.....	277		277

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	PUBLIC		
	Men	Women	Total
Albany	60	89	149
Allegany	46	40	86
Broome			
Cattaraugus	1		1
Cayuga	103	77	180
Chautauqua	2	1	3
Chemung	35	30	65
Chenango			
Clinton		2	2
Columbia		10	10
Delaware		1	1
Cortland			
Dutchess		1	1
Erie	35	5	40
Essex	2	2	4
Franklin	10	4	14
Fulton	10	5	15
Genesee	29	21	50
Greene	3	1	4
Hamilton	1		1
Herkimer	6	7	13
Jefferson			
Kings		2	2
Lewis	5	1	6
Livingston	17	20	37
Madison	3	2	5
Monroe	13	49	67
Montgomery	11	9	20
New York	116	104	220
Niagara	9	3	12
Oneida	2	1	3
Onondaga	27	27	54
Ontario	95	89	184
Orange	7	2	9
Orleans	20	17	37
Oswego	2	5	7
Otsego			
Putnam		3	3
Queens	15	17	32
Rensselaer	12	55	67
Richmond		7	7

Table No. 20—(Concluded)

COUNTIES	PUBLIC		
	Men	Women	Total
Rockland	1	.....	1
St Lawrence . . . . .	.....	.....	.....
Saratoga	11	12	23
Schenectady	8	13	21
Schoharie . . . . .	.....	.....	.....
Schuyler	37	26	63
Seneca	51	45	96
Steuben	124	87	211
Suffolk	6	2	8
Sullivan	1	.....	1
Tioga . . . . .	.....	.....	.....
Tompkins	51	50	101
Ulster	1	17	18
Warren	1	4	5
Washington . . . . .	.....	11	11
Wayne	58	46	104
Westchester	12	46	58
Wyoming . . . . .	.....	.....	.....
Yates	21	36	57
Soldiers and Sailors' Home	29	.....	29
State patients	16	2	18
Total	1,130	1,106	2,236

APPENDIX

HISTORICAL REVIEW OF THE WILLARD STATE
HOSPITAL

In 1887 the superintendent of the then Willard Asylum for the Insane printed upon the press at that time owned by the asylum an historical account of the institution.

This contained a bird's-eye view of the buildings and grounds, of which the illustration contained in the present report is a reduced reproduction, and also printed a description of a number of the buildings, together with cuts showing floor plans and certain elevations and a general view of the principal grounds of the hospital. The plans, etc., will be left out of this report, but inasmuch as a number of years have passed since the data referred to was printed, and as I do not find this in any one place in any of the reports, I have thought well to include it in an appendix to the report for this year, and shall take the liberty of producing the text as formerly written and printed by the superintendent in 1887 without change. However, I wish also in this connection to call attention to the table which I add to the printed data referred to, which will show the weekly cost of the hospital for the various years from 1872 to 1886 inclusive, made by computing and adding to the original table the weekly cost of salaries, clothing and such other expenditures as we find upon the books of the institution, and which were not formerly charged to the weekly per capita cost, being paid for in an entirely different way. This matter of the per capita cost of the insane of the Willard Asylum has, as I find, been considerably misunderstood, but the matter is only of a similar kind to that which we find in other institutions where certain items are chargeable to one fund and others to another. Under the old system the board of trustees fixed the rate that was charged to the counties for the care of the insane in the institution from the several counties in the State, and outside of this State paid certain of the expenses, such as the salaries of officers and clothing, while in addition breakage and some other minor mat-

ters were charged in additional bills to the counties and as against the cost of maintaining certain individual patients. The result of this has been that outsiders often claim that the cost of maintaining the insane at the Willard State Hospital was less years ago than now, although it was not taken into consideration that at that time the institution was supposed to care for only the chronic insane.

Since the 1st of June, 1890, this institution has been an institution for the reception of the acute insane from its own particular district, and to-day the percentage of acute cases in the institution is practically the same as at any of the other large hospitals of the State.

Some years ago I made an inquiry concerning the old admissions and I found, much to my surprise, that owing to the transfers that had been made to enable the State in filling vacancies where additional accommodations had been provided in the other hospitals patients belonging to each of the other districts had been removed as far as possible to the hospitals for those districts, and of the patients at the time mentioned in residence at the Willard State Hospital less than one-third of the patients in residence prior to June, 1890, remained in the institution. Of the remainder about one-half had been received by us upon transfers at different times from the other hospitals of the State, while the remaining one-half or one-third of the whole had been received by us upon original commitments from their homes or elsewhere in our own district. Several years having now passed, the divergence from the old conditions would naturally be greater than before, but notwithstanding this fact, owing to our being able to obtain better prices than in the earlier days upon staples and commodities, and our improved methods of handling business, etc., it is noteworthy that latterly, with one or two exceptions, the weekly per capita cost of maintaining the insane at the hospital has been as low or even lower than it was in the old days when the institution cared for the chronic insane alone. The 1887 report referred to is as follows:

WILLARD ASYLUM FOR THE INSANE

Subsequent to the creation and opening of the State Lunatic Asylum at Utica in 1843, the subject of increasing and improving the accommodation for the insane of the State of New York engaged the attention of the Legislature from time to time. In January, 1844, Dorothea L. Dix presented a memorial to the Legislature, representing the condition of the insane in county almshouses and other places as she found it on a personal inspection. In 1855 a convention of superintendents of the poor memorialized the Legislature to erect additional asylums. In the year 1856 a special committee of the Senate created for the purpose made a personal inspection of the asylums and poor-houses, and presented a report with recommendations to the Legislature of 1857. During this period and following it successive Governors of the State, the managers of the State Lunatic Asylum and its superintendent, Dr. Gray, as well as the State Medical Society, urged upon the Legislature the wretchedness and neglect that existed in the care of the insane in county houses and the necessity of enlarging the accommodations for the increasing number of the insane. While these various movements were continuous in respect to time they were not connected. The State did not act and the various suggestions were unheeded.

In the year 1863 the State Medical Society appointed Dr. Charles A. Lee, Dr. Sylvester D. Willard and Dr. George Cook a committee to confer with the medical committees of the Senate and Assembly on the subject of the "appointment of a Commissioner of Lunacy, whose duty it should be to examine personally into the condition of the insane confined in the public and private lunatic asylums and almshouses and report their condition to the next Legislature with such suggestions for their relief as may be deemed proper." In pursuance of this action the Legislature, by an act passed April 30, 1864, devolved upon the secretary of the State Medical Society, Dr. Sylvester D. Willard, the duty of procuring the information desired and furnishing a report. The law directed that a series of questions

likely to elicit the greatest amount of information on the subject should be prepared, printed and transmitted to each county judge in the State:

*“It directed the county judge, on the reception thereof, to appoint a competent physician, a resident of the county, to visit the county poorhouse, or institution where the insane poor are kept, and to examine into the condition and treatment of the insane inmates, and to transmit the results of the examination. It directed me thereupon to condense the information so received, and report the same to your honorable body.” Fifty-two physicians of as many counties furnished replies to the questions propounded, and the information received furnished the basis of the report and suggestions of Dr. Willard to the Legislature of 1865. In his message to the Legislature Governor Fenton, in calling attention to the condition of the insane poor, thus alluded to the forthcoming report of Dr. Willard:

“The Legislature of 1864 directed an investigation into the condition of the insane poor confined in the various county poorhouses. A report by Dr. Willard will be duly presented, showing the deplorable condition of this most unfortunate class. There are in fifty-five counties confined in poorhouses, or poorhouse asylums, not including New York and Kings, thirteen hundred and forty-five lunatics, nearly all of whom are incurable; many have become, and others are fast becoming, incurable from inefficient care and treatment. The time has arrived when legislative provision should be made. The propriety of establishing an institution for *incurables*—an institution that shall relieve county authorities from the care of the insane—should be deliberately considered.

“More than one-fourth of this number of insane are capable of some labor. To what extent that labor, organized and systematized, might be made productive in the maintenance of an institution, under well directed superintendence, is likewise worthy of consideration.”

A bill was reported by the committee, of which Dr. W. H.

* Report of Dr. Willard.

Richardson was chairman, creating a second State lunatic asylum to be known as the Beck Asylum for the Insane.

Dr. Willard died April 2, 1865. In a biographical notice published in the transactions of the State Medical Society for 1866 Dr. Franklin B. Hough pays a deserved tribute to the work of Dr. Willard in investigating the condition of the insane poor, his energy in collecting information and his zeal in promoting the establishment of a new asylum for their care. His biographer remarks, "His death made a marked impression upon the public mind, and his prominent position [Surgeon-General of the State of New York] suggested a further mark of honor. The bill then in the Senate was amended, and became a law with the name changed to the Willard Asylum for the Insane."

The title of the bill as passed was: "An act to authorize the establishment of a State asylum for the chronic insane, and for the better care of the insane poor, to be known as the Willard Asylum for the Insane." Dr. John P. Gray, Dr. Julian T. Williams and Dr. John B. Chapin were appointed commissioners by Governor Fenton to locate and erect the asylum. In deciding upon a location the commission was directed to "first seek for and select any property owned by the State, or upon which it had a lien," referring by implication to the State Agricultural College in the town of Ovid. Soon after their organization the commission adopted a proposition that the plan of the Willard Asylum should comprise a central administration block; wings for the hospital care of excited patients and such others as required for any reason frequent medical visitation and supervision, and groups of detached blocks for the reception and care of harmless, industrious and manageable patients.

The commission having obtained a title to the State Agricultural College in December, 1865, submitted plans to Governor Fenton in January, 1866, which were subsequently approved by him. At this period Dr. Gray withdrew from the commission and Dr. Lyman Congdon was appointed in his place. During the summer of 1866 a contract was made for the erection of the center building, one section of the north and south wings, the

buildings in the rear of the center, and work was commenced.

In accordance with powers conferred upon the Governor, James A. Bell of Jefferson, Judge Allen of Washington, Sterling G. Hadley, John E. Seeley, James Ferguson of Seneca, and Genet Conger of Ontario, were appointed trustees of the asylum in 1867.

In January, 1869, Dr. John B. Chapin was appointed medical superintendent, and accepted the office April 1st.

The title and the several sections of the organic act of the asylum indicate the plain intent of the Legislature to change the system which was then in existence of providing for recent cases in a State asylum and chronic and incurable cases in poorhouses. The act creating the Willard Asylum required that all cases, both recent and chronic, of the indigent class needing the treatment or care of an asylum for the insane should, on the completion of the new asylum, be placed under State supervision and custodial care. The Willard law indicated a great advance of public sentiment toward the better care of the insane poor. The plans prepared by the commission contemplated the segregation of patients and classes according to their condition, and a plant which would permit the economical enlargement of the asylum by the erection of additional blocks. While the State had thus entered upon a comprehensive system for the care of the insane, plans were adopted which were a decided departure from those which previously had been regarded as most suitable and even essential. Three years before the asylum was ready for occupation the manner in which the purpose of the Legislature was to be executed was foreshadowed in the following language, which may be reproduced here:

“The plan of buildings at Ovid comprises a hospital for the paroxysmal, excited and grossly demented, with groups of detached blocks, plain and inexpensive in their construction, for those whose condition is such as to permit of their being employed in agricultural, horticultural or other industrial pursuits, with benefit to themselves and the asylum. It is believed that the plan of building here indicated will materially reduce the

cost of construction, allow of a system of classification and general management which will considerably diminish the cost of maintenance, and at the same time that the health and happiness of the patients will be in the highest degree promoted.

“This plan also permits of expansion in such a manner as to obviate the objections to a large establishment under one roof. The institution is, in short, designed to supersede the miserable system of providing for the chronic insane in the poorhouses, and by placing them in an establishment adapted to their condition, and care for them in accordance with medical and humane ideas, develop their industrial capacities and demonstrate the fact that they can be properly provided for at a cost per week which will place such care within the reach of every county, thus opening the way to the complete abandonment of county house receptacles for such of the chronic insane as may need the custodial appliances of an asylum for the insane.

“For the first time the important principle is recognized that the chronic insane poor are equally with the acute recent cases entitled to proper care and treatment under State supervision, and any State which neglects to provide for all of this unfortunate class by the establishment of a humane, comprehensive system of care is guilty of injustice and partiality.”

Three principal objects were sought to be accomplished:

First—The care of the insane of the chronic and incurable class in a State institution and their transfer from county poorhouses to State supervision;

Second—The modification and change of the usually approved hospital plans, so as to reduce the cost of construction materially, and the erection of supplemental or detached buildings for the care of mild and harmless cases; and

Third—The aggregation of numbers in order to divide the cost of support among a large number, so that the average charge might be reduced.

The commissioners having reported the buildings in course of construction so far advanced toward completion as to be in readiness for occupation during the year, the Legislature in May, 1869, abolished the commission, devolved its powers and duties

upon a new board of trustees, which was created to supersede the board first appointed. The new board consisted of John E. Seeley, Sterling G. Hadley, Samuel R. Welles, William A. Swaby of Seneca, Darius A. Ogden of Yates, George J. Magee of Schuyler, Francis O. Mason and Genet Conger of Ontario.

In September a circular was issued to the superintendents of the poor announcing that the asylum would be ready for the reception of two hundred and fifty patients on the 12th of October. Applications for more than five hundred patients were received. On the 13th October the first patients were received, three of whom were brought in chains.

In 1870 the Legislature made an appropriation to extend the south wing and to alter the Agricultural College building for the accommodation of patients, known thereafter as the "branch." In 1871 the south wing was extended and a group of five detached blocks was commenced, which were completed in 1872. The second group was occupied in 1876, the third group in 1877 and the fourth group in 1880.

As it had been the policy of the trustees to make no discrimination in the condition of patients to be received, and as they have encouraged the transfer of such cases as would seem to afford the greatest relief to county institutions, there has been, as was to be anticipated, an unusual accumulation of patients in an advanced stage of enfeeblement—epileptics, paralytics and others bedridden from various causes of physical impairment—all requiring much personal attendance day and night. In 1884 the trustees recommended that new buildings be erected for the special and better care of this group of cases, numbering about one hundred of each sex. The Legislature of 1886 authorized the erection of a group of detached blocks as an infirmary for men, and a further modification of the building known as the "branch," to be hereafter used as an infirmary for women. The principal features of the one-story infirmary wards are the allotment of the space to day wards and large dormitories, with a few single rooms, large associate dining-rooms and an administration block, all calculated to furnish an efficient service both night and day.

Additions of land have been made to the original purchase from time to time. The farm of the asylum now comprises nine hundred and thirty-one acres.

The total expenditure for erection of buildings of all kinds, land, furniture, water-works and all purposes, except salaries and maintenance, has been \$1,489,841. The capacity of the asylum is 1,800, and the average cost of construction, equipment, land, improvements, changes and subsequent modifications has been \$827 per patient. The whole number of patients admitted from the opening of the asylum October 12, 1869, to September 30, 1886, was three thousand nine hundred and sixty-four.

The following table shows the average cost of support for a period of fourteen years, excluding salaries of the staff of medical officers and clothing.

The table is of interest in showing the relation that numbers bear to the cost of support, and how much the products of a large farm and the labor of patients may reduce it:

Weekly cost, less salaries, clothing and certain other expenditures			* Aggregate cost
1872.... Daily average of patients.....	564	Weekly cost.....	\$3 15
1873.... Daily average of patients.....	727	Weekly cost.....	3 09
1874.... Daily average of patients.....	827	Weekly cost.....	3 09
1875.... Daily average of patients.....	938	Weekly cost.....	2 96
1876.... Daily average of patients.....	1,076	Weekly cost.....	2 83
1877.... Daily average of patients.....	1,227	Weekly cost.....	2 87
1878.... Daily average of patients.....	1,340	Weekly cost.....	2 71
1879.... Daily average of patients.....	1,430	Weekly cost.....	2 63
1880.... Daily average of patients.....	1,565	Weekly cost.....	2 72
1881.... Daily average of patients.....	1,695	Weekly cost.....	2 67
1882.... Daily average of patients.....	1,759	Weekly cost.....	2 64
1883.... Daily average of patients.....	1,748	Weekly cost.....	2 65
1884.... Daily average of patients.....	1,790	Weekly cost.....	2 61
1885.... Daily average of patients.....	1,835	Weekly cost.....	2 37
1886.... Daily average of patients.....	1,835	Weekly cost.....	2 26
1887....			2 646
1888....			2 827
1889....			2 597
1890....			2 725
1891....			2 851
1892....			3 04
1893....			2 98
1894....			2 67
1895....			2 835
1896....			2 97
1897....			3 11
1898....			3 019
1899....			3 095
1900....			2 966
1901....			3 06

* Please notice that the last table showing the "aggregate cost" for maintaining patients at the hospital, made by adding the cost for clothing and salaries, etc., which was not formerly included in this per capita, has been added to the text quoted from the original historical review, and is new matter. Weekly per capita cost, inclusive of all items, can be found upon the books of the hospital.

† Eighteen months.

The following persons have served as trustees of the asylum since its opening:

John E. Seeley, reappointed 1869; resigned 1872.

Genet Conger, reappointed 1869; resigned 1877.

Sterling G. Hadley, reappointed 1869; term expired 1896.

Darius A. Ogden, appointed 1869; died May, 1889.

George J. Magee, appointed 1869; resigned 1884.

Samuel R. Welles, appointed 1869.

William A. Swaby, appointed 1869; term expired 1882.

Francis O. Mason, appointed 1869; resigned 1894.

George W. Jones, appointed 1873; died October 17, 1886.

James F. D. Slee, appointed 1877; term expired 1882.

Diedrich Willers, Jr., appointed 1882; resigned 1889.

S. H. Hammond, appointed 1882; still in office.

A. S. Stothoff, appointed 1884; still in office.

*James A. Flanagan, appointed 1888.

O. G. Shearman, appointed 1889.

S. G. Van Vleet, appointed 1890.

Henry Peterson, appointed 1895.

Prof. J. L. Morris, appointed 1895; still in office.

William J. Pollard, appointed 1897; still in office.

John H. Osborne, appointed 1897; still in office.

Martin L. Allen, appointed 1897; term expired 1899.

Mrs. C. S. Mongin, appointed 1897; still in office.

A. B. Houghton, appointed 1900; still in office.

Dr. Chapin resigned the office of medical superintendent September 1, 1884, to accept the appointment of physician-in-chief of the Pennsylvania Hospital for the Insane, and was succeeded by Dr. P. M. Wise, formerly the senior medical officer.

On the creation of the Willard Asylum, its object and plans became the subject of widespread professional discussion, but

* Please note that the data regarding the appointment of the managers since 1884 has been added to the old table, and such particulars are given as could be easily ascertained without reference to the Secretary of State's office to find how the incumbents of the various positions noted left, that is, whether by death, resignation or promotion of office, etc.

(The note for the preceding table and the above note are added as new matter to the reprint of the old historical review or account of the hospital, and these additions are made in this way rather than to rewrite the whole of this account, for which there would not be sufficient time to enable us to incorporate the matter in the present report.)

its practical results have taken the place of speculation and theory. It has been demonstrated that it is practicable to reduce the usual cost of construction of asylums for the insane and their subsequent maintenance, to abolish all mechanical forms of restraint and to enlarge their personal liberty and means of employment. A marked modification of the views that had been entertained in regard to plans of asylums and the policy of the State toward the indigent insane has taken place. Not the less remarkable and among the secondary respects has been the decided improvement in the condition of the county almshouses, due in part to the removal of a disturbing and troublesome class. While the plans that were adopted may not be exactly such as would now be recommended with the experience of eighteen years, they however embody ideas and suggestions which, it will be found, mark a new departure, and will work important changes in asylums to be hereafter erected.

NOTE—Dr. Wise resigned early in 1890 to accept the superintendency of the St. Lawrence State Hospital at Ogdensburg, N. Y., and was succeeded by Dr. Charles W. Pilgrim, for several years senior medical officer at Utica, N. Y., who, after a service of more than three years as superintendent of this hospital, left May 3, 1893, to accept a like place of confidence at the Hudson River State Hospital, and was succeeded in office by Theo. H. Kellogg, M. D., formerly Superintendent of New York City Asylum for the Insane. Dr. Kellogg entered upon his duties as Medical Superintendent May 12, 1893. Dr. Kellogg resigned November 1, 1895, and was succeeded by Dr. William Mabon of the Utica State Hospital. Dr. Mabon has served for ten years as assistant physician and was entirely familiar with the workings of the State hospital system. Dr. Mabon resigned December 1, 1896, having been appointed Medical Superintendent of the St. Lawrence State Hospital at Ogdensburg. Dr. Wm. Austin Macy, Superintendent of Manhattan State Hospital, East, was appointed to succeed Dr. Mabon.

THIRTY-FIFTH ANNUAL REPORT
OF THE
MANAGERS
OF THE
HUDSON RIVER STATE HOSPITAL
AT POUGHKEEPSIE, N. Y.
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

OFFICERS OF THE HOSPITAL

BOARD OF MANAGERS

Frank B. Lown, President.....	Poughkeepsie
Isaac W. Sherrill, Vice-President.....	Poughkeepsie
Hudson Taylor	Poughkeepsie
George M. Hine.....	Poughkeepsie
Lewis R. Parker.....	Albany
Catherine A. Newbold.....	Poughkeepsie
Augustus B. Gray.....	Poughkeepsie

SECRETARY AND TREASURER

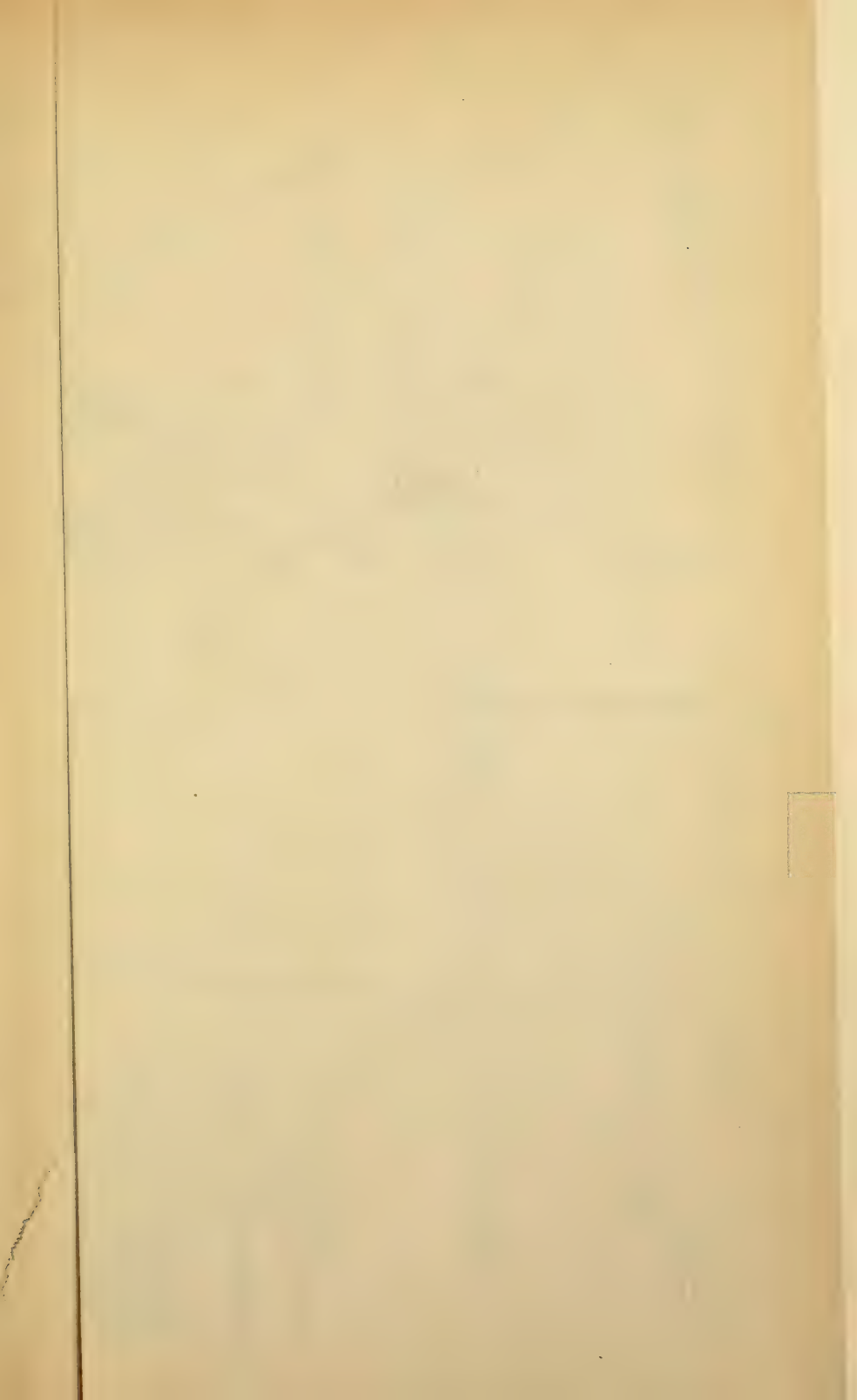
Allison Butts	Poughkeepsie
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ATTORNEY

Henry M. Taylor	Poughkeepsie
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RESIDENT OFFICERS

Charles W. Pilgrim, M. D.....	Medical Superintendent
J. Elvin Courtney, M. D.....	First Assistant Physician
Charles H. Langdon, M. D.....	Second Assistant Physician
Isham G. Harris, M. D.	Assistant Physician
Thomas E. Bamford, M. D.....	Assistant Physician
Samuel F. Mellen, M. D.	Junior Assistant Physician
John G. Elliott, M. D.....	Junior Assistant Physician
Louis T. Waldo, M. D.....	Junior Assistant Physician
John Acheson, M. D.....	Medical Interne
William J. Cavanaugh, M. D.....	Medical Interne
Emma Putnam, M. D.....	Woman Physician
Louis P. Gillespie.....	Steward
Allura Barrington	Matron





REPORT OF THE MANAGERS

To the State Commission in Lunacy

Gentlemen.—The managers of the Hudson River State Hospital herewith present their thirty-fifth annual report for the year ending September 30, 1901.

The treasurer's report shows that the expenditures for the year chargeable to the maintenance accounts were \$378,361.51. This amount includes officers' salaries, transportation of patients to and from the hospital, and in fact all expenditures of any kind, except such as were made under special appropriations.

With an average daily population of 2,089, the weekly per capita cost was \$3.47. This is one cent higher per week than it was for the preceding year, and is more than accounted for by the increased expenditure for coal caused by the increase in freight charges of \$0.15 per ton from Poughkeepsie to the hospital. The railroad company had heretofore charged \$0.30 per ton for this service, but last year they increased the charge to \$0.50 per ton. This was considered excessive, and an appeal was made to the State Railroad Commission. After several hearings the Railroad Commission decided that \$0.45 per ton would be a fair compensation to the railroad company. In addition the price of coal advanced considerably so that the expenses for fuel and light reached the sum of \$41,970.92 as against \$38,458.63 for the year immediately preceding. Had it not been for this we would have shown a reduction of at least 3 cents per week in the per capita cost.

We feel, however, that the showing is a good one, and that we have reached a point beyond which it will be very difficult to go if we are to continue to give the patients the care they require. If further reductions are necessary, they will have to be made at the expense of the comfort and care of those who are unable to care for themselves. In this connection it is interesting to note

the gradual and marked decrease in the cost of maintaining the patients since the opening of the institution. The figures are as follows:

1872.....	\$4 03
1873.....	9 25
1874.....	8 83
1875.....	7 90
1876.....	8 13
1877.....	7 43
1878.....	7 25
1879.....	5 30
1880.....	5 98
1881.....	6 86
1882.....	7 09
1883.....	5 80
1884.....	5 51
1885.....	5 45
1886.....	5 43
1887.....	5 85
1888.....	5 64
1889.....	6 27
1890.....	5 75
1891.....	5 25
1892.....	5 03
1893.....	4 93
1894.....	4 15
1895.....	3 92
1896.....	4 14
1897.....	4 09
1898.....	3 82
1899.....	3 70
1900.....	3 46
1901.....	3 47

The superintendent's report explains in detail the operations of the various departments of the hospital. Reference to it will show that there were 2,091 patients in the hospital at the beginning of the year and 2,094 at the close. It will thus be seen that the admissions and discharges were very nearly even, and that it would be possible for the hospital to care for all the new cases occurring within its district, and that there would be no serious danger of any greater crowding than at present exists if it were not for the transfers which from time to time it is found necessary to make from other hospitals.

It is gratifying to be able to state that the recovery rate is steadily rising. Last year it reached more than 35 per cent., which is 5 per cent. higher than it was the year before.

Two important additions—the infirmary ward for women and the sun rooms for wards 2 and 6—were begun late in the summer and are well under way. The infirmary will afford great relief, permitting the removal of the beds in the corridor leading to the laundry and amusement hall, and the sun rooms will greatly improve the wards with which they are connected.

Extensive repairs are also under way in the men's wards of the central group, and the bathrooms in wards 11, 3 and 4 and 7 and 8 of the main building are undergoing extensive improvements. A good deal of painting has been done outside, and the wards have been kept in as good repair as it was possible to keep them with the facilities at our command.

The needs for the coming year are described in the superintendent's report, and we respectfully ask for their careful consideration. The purification of the water supply and the disposal of the sewage are matters which will soon have to be settled, and they will require the careful attention of an experienced sanitary engineer.

There have been two changes in the board of managers since our last report. Hon. George M. Hine was appointed on January 1, 1901, in place of Eugene N. Howell, whose term had expired, and Hon. Augustus B. Gray was appointed September-

27, 1901, in place of Mrs. Beard, who was compelled to resign on account of moving away from Poughkeepsie.

Frequent visits of inspection have been made by the managers, and they are pleased to be able to state that the patients and wards have always been found in good condition, and that the officers, attendants and nurses have at all times given evidence of interest in their work and in the welfare of the hospital.

Respectfully submitted.

FRANK B. LOWN

I. W. SHERRILL

HUDSON TAYLOR

LEWIS R. PARKER

G. M. HINE

CATHERINE A. NEWBOLD

AUGUSTUS B. GRAY

Dated December 21, 1901

REPORT OF THE TREASURER

To the Managers of the Hudson River State Hospital

The treasurer of the Hudson River State Hospital respectfully submits the following statement of his receipts and expenditures for the fiscal year ending the 30th day of September, 1901:

Salaries of Officers

Balance on hand October 1, 1900.....	\$94 45
Received from Comptroller.....	20,780 00
Total	<u>\$20,874 45</u>
Payments—twelve vouchers, pay-rolls, salaries...	20,786 04
Balance on salaries October 1, 1901.....	<u><u>\$88 41</u></u>

Wages of Employees

Balance on hand October 1, 1900.....	\$63 92
Received from Comptroller.....	125,800 00
Remittance of overpayments.....	15 00
Total	<u>\$125,878 92</u>
Paid twelve pay-rolls for wages.....	125,334 74
Balance on wages October 1, 1901.....	<u><u>\$544 18</u></u>

Supplies

Balance on hand October 1, 1900.....	\$22 87
Received from Comptroller.....	223,700 00
Received from farm and grounds.....	166 75
Received from uniforms and materials.....	239 35
Received from sundries.....	1,388 41
Transferred from clothing manufacturing fund....	9,790 07
Remittance of overpayments.....	20 00
Total	<u>\$235,327 45</u>
Paid out as per vouchers 1 to 1,899, inclusive.....	232,400 73
Balance on supplies October 1, 1901.....	<u><u>\$2,926 72</u></u>

*Received from Patients and Interest on Deposits Transmitted to the
State Comptroller*

Received from reimbursing patients.....	\$14,561 44
Received from private patients.....	13,446 61
Received from interest.....	258 88
Total	<u>\$28,266 93</u>

Paid State comptroller in pursuance of chapter 580, laws of 1899.....	<u>\$28,266 93</u>
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Clothing Manufacturing Account

1900. Balance on hand October 1, 1900.....	\$7,809 20
Dec. 22. Received from general fund on voucher 277	1,980 87
	<u>\$9,790 07</u>
Transferred to general fund (account closed).....	<u>\$9,790 07</u>

Extraordinary Improvements

(Chapter 364, Laws of 1900)

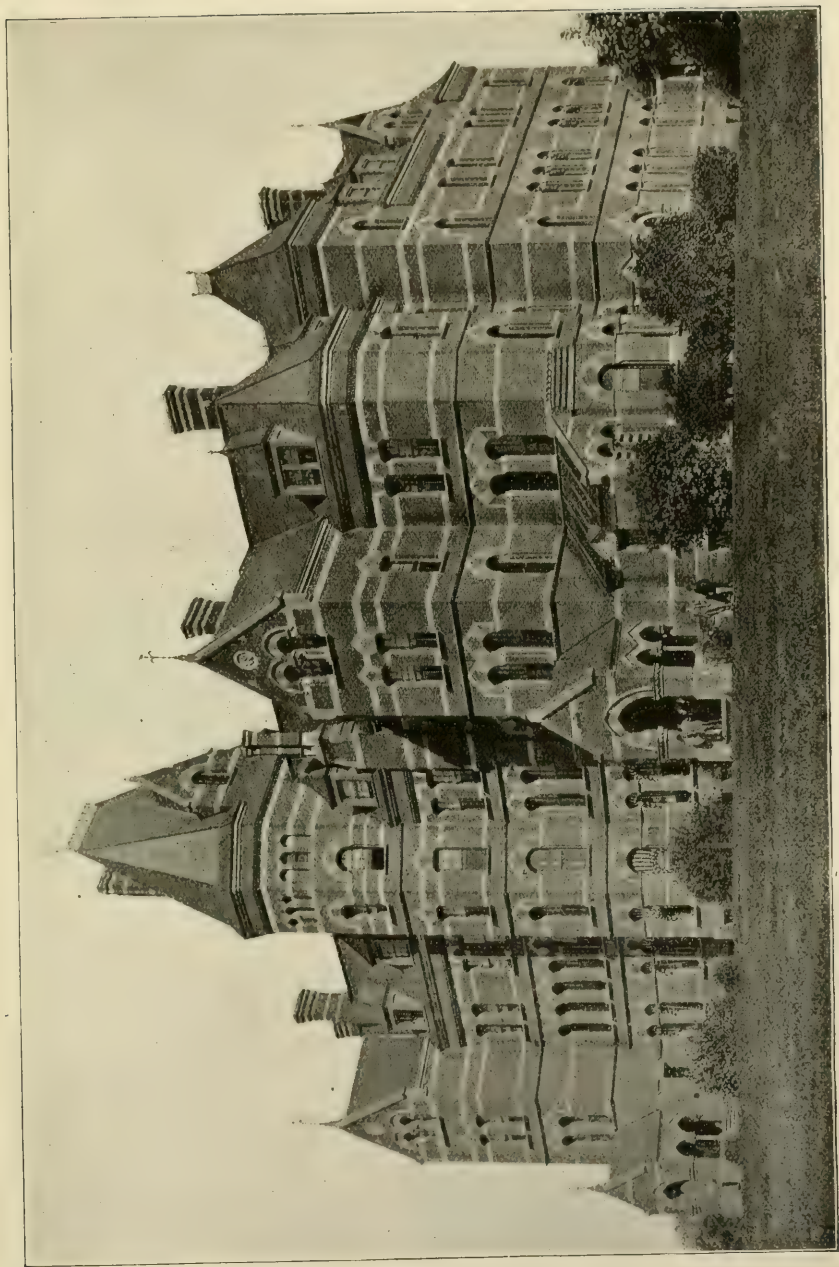
Received from Comptroller.....	\$26,232 27
Paid vouchers 84 to 216.....	26,232 27

(Chapter 322, Laws of 1901)

Received from Comptroller.....	\$13,383 53
Paid vouchers 1 to 84 inclusive.....	13,383 53

Total Expenditures

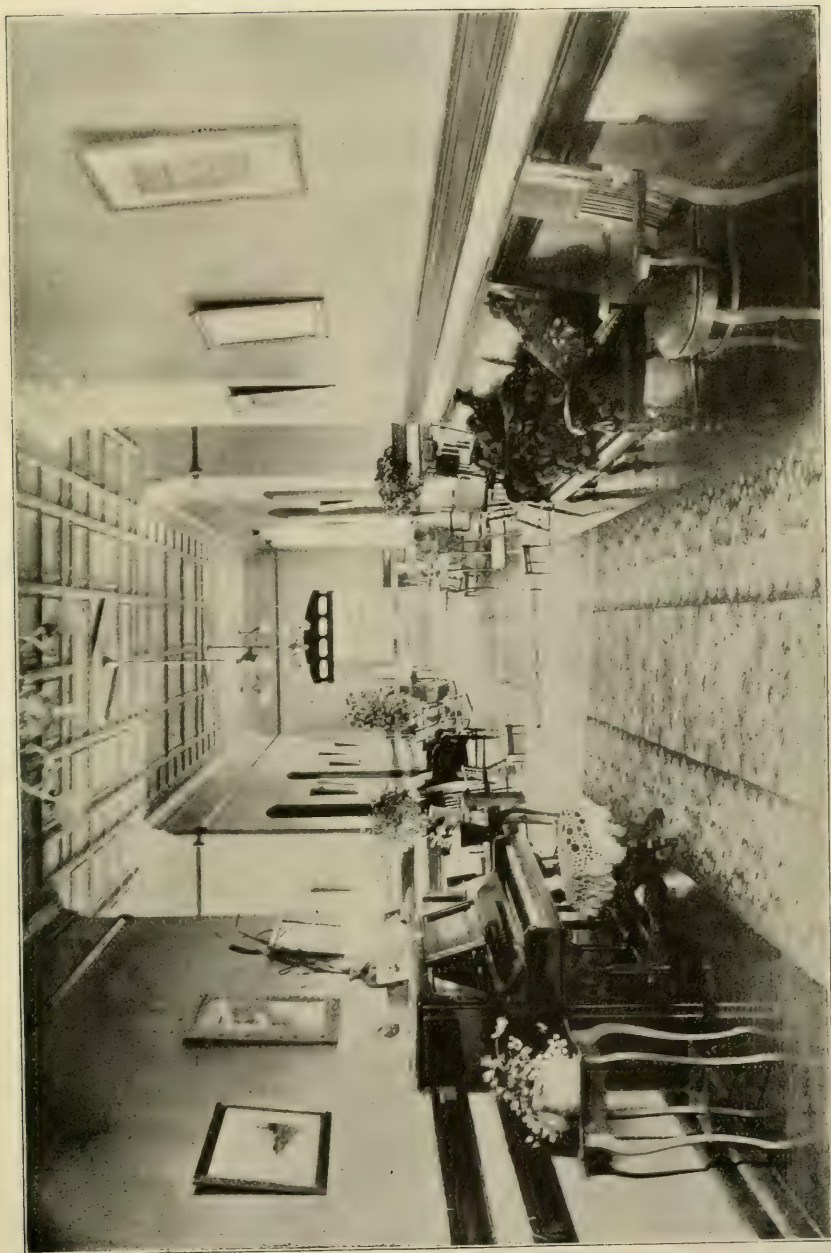
For officers salaries.....	\$20,786 04
For wages	125,334 74
For supplies	232,400 73
	<u>\$378,521 51</u>



HUDSON RIVER STATE HOSPITAL.—ADMINISTRATION BUILDING.



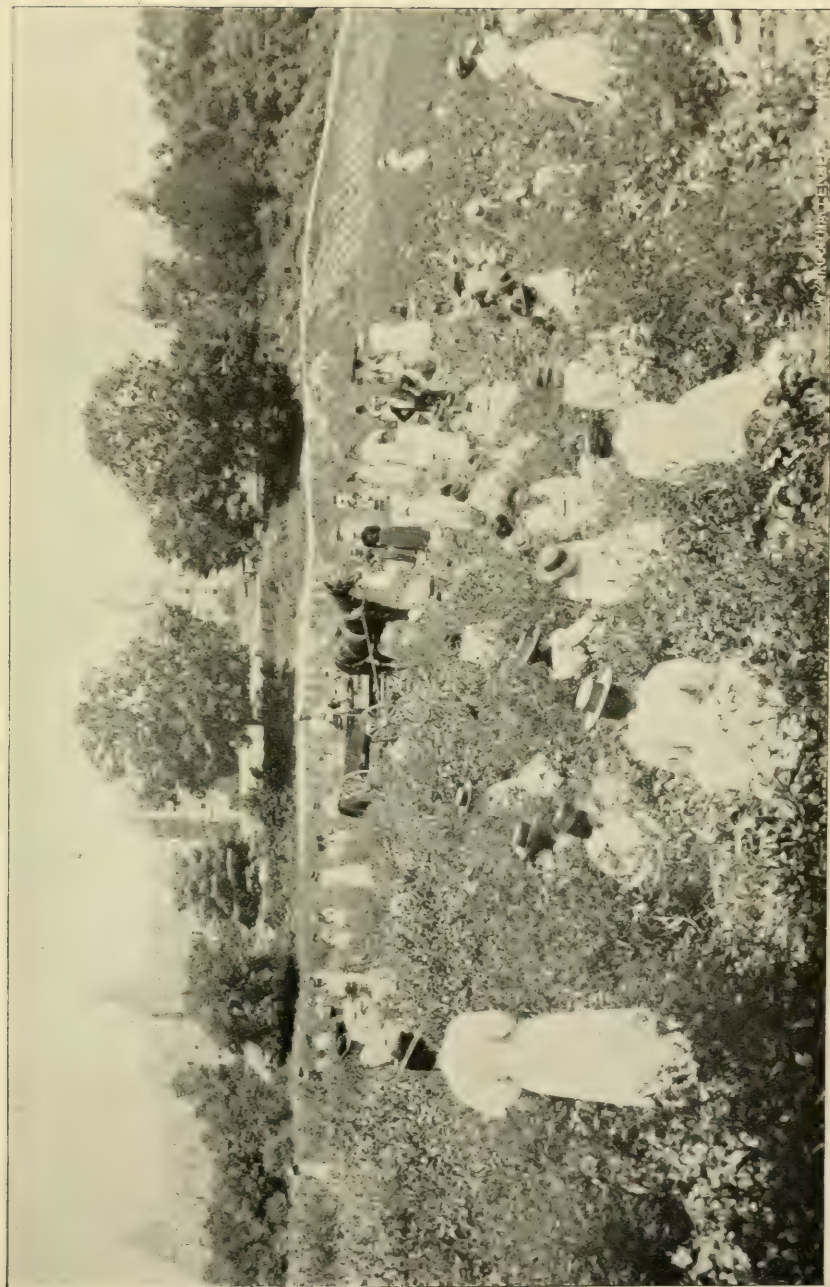
HUDSON RIVER STATE HOSPITAL.—BIRD'S-EYE VIEW.



HUDSON RIVER STATE HOSPITAL.—OBSERVATION WARD FOR WOMEN.



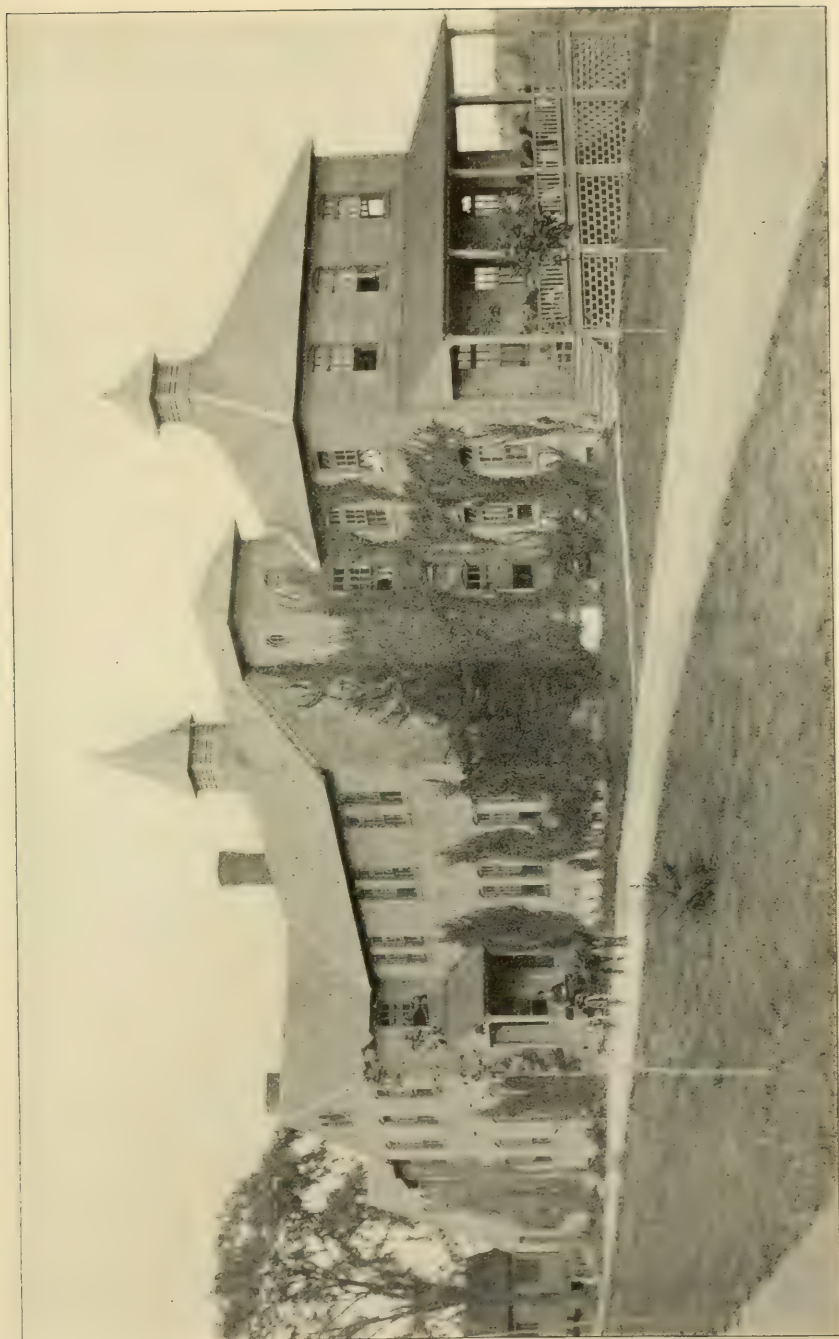
HUDSON RIVER STATE HOSPITAL.—NURSES' COTTAGE.



HUDSON RIVER STATE HOSPITAL.—PATIENTS PICKING PEAS.



HUDSON RIVER STATE HOSPITAL.—DINING ROOM.



HUDSON RIVER STATE HOSPITAL.—COTTAGE FOR CONSUMPTIVES—EAST FARM.

Extraordinary Improvements

Chapter 364, Laws of 1900.....	\$26,232 27
Chapter 322, Laws of 1901.....	13,383 53
	<hr/>
	\$39,615 80
	<hr/> <hr/>

Summary of Cash Balances

Balance on salaries October 1, 1901.....	\$88 41
Balance on wages October 1, 1901.....	544 18
Balance on supplies.....	2,926 72
	<hr/>
Total balance on hand.....	\$3,559 31
	<hr/> <hr/>

Respectfully submitted.

ALLISON BUTTS

Treasurer

To the Board of Managers of the Hudson River State Hospital

In pursuance of section 40 of the insanity law, we respectfully report that we have examined the treasurer's accounts up to the end of the last day of September, 1901, and compared the same with the books and vouchers, and verified the result by further comparison with the books of the steward, and we have found the same to be correct.

FRANK B. LOWN

G. M. HINE

LEWIS R. PARKER

Committee

Dated December 21, 1901

REPORT OF THE SUPERINTENDENT

To the Board of Managers of the Hudson River State Hospital

Gentlemen.—In compliance with the requirements of the law and your regulations, the following report of the operations of the hospital for the fiscal year ending September 30, 1901, is respectfully submitted:

	Men	Women	Total
Number of patients remaining			
October 1, 1900.....	982	1,109	2,091
Admitted during the year ending			
September 30, 1901.....	246	228	474
	<hr/>	<hr/>	<hr/>
Total number under treat-			
ment during the year.....	1,228	1,337	2,565
	<hr/>	<hr/>	<hr/>
Daily average population.....	979	1,110	2,089
Capacity of institution.....	998	1,057	2,055
	<hr/>	<hr/>	<hr/>
Discharged during the year:			
As recovered	93	73	166
As not recovered	48	46	94
Died	110	101	211
	<hr/>	<hr/>	<hr/>
Whole number discharged			
during the year.....	251	220	471
	<hr/>	<hr/>	<hr/>
Remaining October 1, 1901.....	977	1,117	2,094
	<hr/>	<hr/>	<hr/>

ADMISSIONS

Of the 474 admissions, 459 were upon original commitments, while 15 were transferred from other institutions for the insane.

DISCHARGES

Of the 66 patients discharged as improved, 28 men and 34 women were taken to their homes and 1 man and 3 women were transferred to other State hospitals.

Of the 28 patients discharged as unimproved, 13 men and 5 women were taken home, 4 men and 3 women were transferred to other State hospitals, 2 men were discharged by order of the court and 1 woman was taken to the home of friends in Europe.

NUMBER UNDER TREATMENT

The greatest number of patients in the institution at any one time during the year was 2,115; the smallest 2,063, and the daily average 2,089.

RECOVERIES

The rate of recoveries upon the number admitted was 35.02 per cent., while it was 35.24 per cent. of the number discharged. This is more than 5 per cent. higher than it was last year.

DEATHS

The total number of deaths during the year was 211, 110 men and 101 women, which is 8.23 per cent. of the number under treatment. In 1898 it was 10 per cent., while in 1899 it was 11 per cent. In 1900 it was 8 per cent.

OCCUPATION

The daily average during the year was 76 per cent. for men and 70 per cent. for women, while the general average was 73 per cent.

AMUSEMENTS AND RECREATION

The various forms of amusements and recreation were provided throughout the year with the usual regularity and with the expected satisfactory results. Without the dramatic entertainments, dances, card parties, ball games, picnics, boat rides, etc., hospital life would indeed be dull and monotonous. But with them, much of the tedium of hospital life is removed and the progress towards recovery is made pleasant and more sure.

TRAINING SCHOOL FOR NURSES

The training school was continued during the year and a class of eight was graduated in June.

Miss Caldwell, of the Buffalo Cooking School Teachers' League, gave a course of daily lectures extending over a period of three months.

MEDICAL SERVICE

On the 30th of September Dr. J. Elvin Courtney, the first assistant physician, resigned for the purpose of engaging in general practice in the west. Dr. Courtney had faithfully served the State in various capacities for about ten years and was always a careful and conscientious officer. He carried with him into his new field of work the best wishes of all his colleagues.

Dr. Raymond F. Metcalf resigned his position of medical interne early in the year and was succeeded by Dr. William J. Cavanaugh, who had occupied a similar position in the Willard State Hospital. Dr. Metcalf, during his short stay, manifested unusual fitness for the work and has since demonstrated his abilities as a physician by securing an appointment in the Medical Service of the United States Army.

IMPROVEMENTS DURING THE YEAR—STOREROOM AND COLD STORAGE

The new storeroom and cold storage which was scarcely completed at the time of writing the last report has been found very satisfactory and very useful. Now that we know its usefulness, we wonder how it was possible for us to have gotten on so long without it.

FARM BARN AND COACH STABLES

The new barns were not ready for occupying until spring, but they have been in use long enough to demonstrate their usefulness and convenience. The old barns have been torn down, and when the grading is finished a very great improvement in the appearance of the grounds will have been effected.

INFIRMARY, SUN ROOMS, ETC.

A number of important changes were begun during the summer, but were not completed at the close of the fiscal year.

A large dormitory at the end of ward 11 will soon be ready for occupancy, when it will be possible to discontinue the use of the corridor leading to the amusement hall for sleeping purposes. This will be a most important improvement, for this corridor has always been unfit for dormitory purposes and its use as such has interfered very much with the legitimate functions of the amusement hall. The new dormitory is well planned and will be provided with toilet and bathrooms, and with two single rooms for the sick and dying.

New sun rooms in connection with wards 2 and 6 are nearly completed. They will give greater light to the wards and will provide much needed day space for the patients.

In addition to the above improvements, extensive repairs are under way in the central group and the bathrooms in wards 3 and 4; wards 7, 8 and 11 of the main building are undergoing thorough renovation.

A considerable amount of painting has been done outside, and the wards have been kept bright and cheerful by the same means inside. The grounds have also been well cared for, and quite a long strip of new road has been made leading from the main drive to the new barns.

REQUIREMENTS FOR 1902—EMPLOYEES' COTTAGE

More than twenty of the men employees are compelled to sleep in basement rooms, which are damp and dreary and unfit for human habitation. Several employees have been compelled to leave the service on account of sickness brought on by living in these unsuitable quarters. Owing to the scarcity of rooms, however, it has been impossible to care for them elsewhere; as many more who have no direct connection with ward work are cared for in attendants' quarters. If they were provided for in an outside building, additional accommodations for patients could be obtained by moving the attendants who now sleep on the wards to the rooms thus vacated. No additional space for patients could be provided, however, by moving those who occupy the basement rooms, as they would be unfit for

anything but storage purposes. I would advocate the construction of a building near the main group of a size to accommodate at least forty persons. This could be done at a cost, when ready for occupancy, of from \$8,000 to \$10,000, the amount depending upon the style of construction.

NEW AMUSEMENT HALL

Our amusement hall is only about half the size it should be, and therefore accomplishes only half the good it ought to. The benefits to be derived from amusements and recreation are very great, and a suitable hall is therefore one of the first needs of a hospital for the insane. Our old hall would make an excellent dormitory and dayroom for about sixty patients, while a new hall twice the size could be erected for considerably less than the \$500 per capita allowed for new buildings. I would advise that an allowance of \$20,000 be made for a new hall and that the old one be devoted to the use of patients.

HYDROTHERAPEUTIC ROOMS

For several years we have called attention to this very desirable improvement, but thus far our appeals have been fruitless. I am convinced that much good might be done if we were properly equipped in this respect, and would therefore urge an appropriation to carry out this work. We have rooms centrally located and admirably adapted for the purpose which could be provided with waterproof floors, etc., for \$1,000. The fixtures, I have been reliably informed, would cost \$1,500, making a total of \$2,500 for the complete equipment.

PLACING FOUR DOORS BETWEEN DINING-ROOMS, NORTH WING, AND FIRE-PROOF STAIRWAY

The placing of four doors, as above indicated, would provide an excellent escape in case of fire, and besides would add to the convenience of administration by permitting entrance to any of the dining-rooms without going through the wards. The cost would be about \$75 for each floor, or \$300 in all.

NINE WINDOWS ON THE ELEVENTH WARD

The eleventh ward, which is a part of the old structure originally intended for shops and employees' rooms, but now used for patients, is rendered somewhat unsuitable for the purposes to which it is now put by the lack of light. This difficulty could be overcome by cutting through the walls and putting in nine additional windows. The total cost would be \$315.

BATHROOMS, WARDS 2, 5 AND 9

The bath and toilet rooms on wards 2, 5 and 9 of the main building are now the only ones which have not been renovated and put in sanitary condition. They are antiquated and in very poor repair. The floors leak and are a source of constant annoyance and expense. Four thousand dollars would be required to put them in good condition.

STEEL CEILINGS

Three of the wards in the main building are unprovided with steel ceilings. As the plaster ceilings are old and badly cracked, the application of steel would be advisable. The total cost would be about \$1,000.

EXTRAORDINARY REPAIRS AND BETTERMENTS

Many things occur during the year calling for extraordinary expenditures which cannot be foreseen at the beginning of the year. In order to provide for such contingencies at least \$2,000 should be set aside to be used as our necessities may suggest.

NEW FURNITURE AND RENEWALS TO FURNITURE

In order to keep the wards up to the required standard of comfort and appearance a certain amount of new furniture should be supplied each year. Unless this is done the wards become shabby and cheerless, and in the end a much larger expenditure is necessary than would be the case if a judicious expenditure were made each year. The sum of \$3,000 is therefore asked for this purpose.

FIRE PROTECTION

We have never fully complied with the laws of the State in regard to the erection of fire-escapes, neither have we any suitable fire system. To provide for our needs in the matter of protection against fire an allotment of \$5,500 will be needed.

CHANGES IN MEDICAL OFFICE, MEDICAL LIBRARY
AND POST-OFFICE

An apportionment of \$1,000 would enable us to enlarge our general medical office to suitable dimensions and to fit up the medical library in a convenient manner. It would also be sufficient to allow for certain very desirable changes in the post-office. We are very much cramped in this department at present, and our facilities for handling the mail are so poor that frequent complaints result.

PORCH FOR WARD 2, MAIN BUILDING

The building of the sun rooms in connection with wards 2, 6 and 10 has supplied a long-felt want, but much greater benefit could be derived from the one in connection with ward 2 (which is our reception ward for women) if a porch were added extending from the north to the east entrance of this ward. It would not cost more than \$250 to make this improvement, and I am sure it would be a wise expenditure to make.

PAINTING, INSIDE AND OUTSIDE

There is nothing which adds to the life of a building and its appearance so much as paint. Even old buildings and dilapidated wards may be made pleasant and cheerful by its judicious use. It is therefore wise to keep the buildings well painted both inside and outside. In order to do all that we should do in the interests of economy and appearances an expenditure of almost \$10,000 will be necessary, divided as follows:

Inside

All the wards, day rooms, etc., north wing.	\$3,108 75	
All the sleeping-rooms, north wing	1,974 00	
All the dining-rooms in main building.	839 25	
	<hr/>	\$5,922 00

Outside

All the tin roofs (204,000 square feet), at one-half cent	\$1,020 00	
Four icehouses	900 00	
Shops.	225 00	
New barns	300 00	
Main boiler house.	150 00	
Eleven hundred and eleven windows and guards, at 80 cents.	888 80	
Verandas at the eight cottages, \$50 each. .	400 00	
	<hr/>	3,883 80
		<hr/>
		\$9,805 80
		<hr/>

TRACK SCALES

Now that we have facilities for bringing coal and other bulky freight to the hospital grounds in car-load lots, a track scale where all such commodities could be weighed would be very desirable. After finishing our cold-storage plant there was a balance of about \$800 which was to be applied towards the purchase of track scales, but owing to difference of opinion in regard to the foundation and location of the scales, the matter was dropped and the money was not used. In order to properly install the scales with suitable foundation and dead rail about \$1,200 will be necessary.

FLAGSTAFF

The sum of \$425 is asked for to purchase a steel flagstaff, 100 feet high, to be located in front of the main building, so that the good example set by the schools of having a flag constantly floating may be followed.

WALKS

We are very much in need of a good walk from the main building to the central group, and also of several walks around the central group. As the patients have to come to the main building from the central group in all sorts of weather, a good walk is a necessity. Eight hundred dollars will be needed for the work.

ROADMAKING

There is considerable roadmaking yet to be done within our grounds and an apportionment of \$1,000 is asked for the purpose of completing the work which we have been at for several years past and which has received such favorable comment from all who have seen the results which have been reached at such slight comparative cost.

GRADING

There is a great deal of grading to be done in order to put our grounds in presentable condition. The greater part of the work can be done by patients, but a small apportionment for carts would greatly expedite it. The sum of \$500 is therefore asked for.

ENTRANCE AND FENCE IN FRONT OF GROUNDS

The old picket fence in front of our grounds will soon have to be renewed or replaced by an iron one. Our entrance is also unattractive and should be provided with stone posts and a gate. Two thousand dollars would probably be necessary for the work.

NEW PAINT SHOP

As we have no paintshop at present, with the exception of a small house for storing supplies, we are obliged to make use of the basements for painting and varnishing furniture, and such work as painting wagons can not be done at all. Eight hundred dollars would enable us to erect a building large enough for all such purposes and would be of very great service to us.

HENNERY

A building where several hens could be kept under proper conditions would, I am sure, be a great source of profit to the hospital. An appropriation of \$500 or \$600 would be sufficient to put up suitable buildings on the east farm, where we have land admirably located for such purposes.

CHAPEL

Attention has frequently been called to the desirability of an outside chapel for those who attend religious services. It would be free from the annoyances to which they are now subjected in using the room over the kitchen workrooms. A suitable building could be erected for about \$7,500.

ENGINEER'S DEPARTMENT

The chief engineer states that all of the following repairs are very necessary:

Strengthening Falkill dam.....	\$3,000
Renewal of plumbing, main building.....	5,000
Repairs to electric plant and renewing where present wiring is defective and dangerous.....	2,000
New duct at main building for steam, water, return pipes, pipe coverings, etc.....	2,200
Two new high pressure boilers.....	3,500
Two fan engines, with connections, north wing..	900
Rearrangement of heating system, south wing...	600
Reconstruction of hot-water service at central group	2,200
Alterations to steam plant in boiler house.....	400
New air compressor at cottages.....	450

WATER SUPPLY

The question of purification of our water supply has come up from time to time, but no definite steps have as yet been taken to overcome the difficulties under which we labor. The question

is of vast importance and should receive early and careful attention. A satisfactory filtering system would probably cost from \$20,000 to \$25,000.

FALKILL DAM

The dam at the Falkill pond needs extensive repairs in order to put it in a safe condition. An estimate furnished by Mr. Caldwell under whose supervision the dam was built calls for an expenditure of \$3,000 for stone and earth foundations.

RESERVOIRS

The walls of the two large reservoirs need pointing up, and in some places it will be necessary to relay them. Four hundred dollars will be required for the work.

LAUNDRY

The laundry dry house is too small to do our work in a satisfactory manner. It was never completed as originally intended, and there is space left for 40 draws, which should be put in. The cost will be about \$30 for each draw, or \$1,200 in all.

A new hot-water generator is also needed. This will cost about \$600.

RENOVATION OF WARDS 21 AND 22

Last year about \$15,000 was asked for to completely renovate these wards, but only \$10,000 could be allotted for the purpose, and nothing has therefore been done to the day rooms. They are in an extremely bad condition and need new floors, new trim throughout and new ceilings. They and the dormitories also need painting, and the walls and heating flues need overhauling. To do the work as it should be done the additional \$5,000 originally asked for will be required.

VISITING ROOMS AT CENTRAL GROUP

As there are no visiting rooms at the central group, visits of friends to patients must be made in the wards, where there can be no privacy and but little comfort. When a visitor must

spend an hour or so trying to converse with a sick relative surrounded by a hundred and fifty disturbed patients, it can be readily understood that neither the friend nor the patient who is visited can obtain the most satisfactory results. On visiting days, when a dozen or more are being visited at the same time, this lack of suitable visiting rooms is a source of great annoyance. A satisfactory room could be added to each side of the group for about \$700, or \$1,400 in all. This is one of our most urgent needs, and I respectfully urge its favorable consideration.

NEW FLOOR IN CONGREGATE DINING-ROOM AND KITCHEN AT THE CENTRAL GROUP

The floor in the large dining-room at the central group is in bad condition and should be renewed. It has been repaired and shored up from time to time, but it has now become so bad that temporary repairs seem useless. An entirely new floor and new beams should be put in. As it is necessary to use large quantities of water in keeping this room clean, a tile floor would be very desirable. It would, however, cost a large amount of money (probably \$4,000) while a good maple floor could be put in for \$1,933.70.

A new floor should also be put in the kitchen, which would cost from \$1,600 to \$2,600, depending upon the kind of material used.

REPAIRS TO TIN ROOFS AT CENTRAL GROUP

The tin roofs at the central group need extensive repairs. If they are not attended to soon the deterioration will be so great that a much larger expenditure will be necessary later on. Probably \$400 would do all that is absolutely necessary.

SUMMER HOUSE FOR DISTURBED PATIENTS AT CENTRAL GROUP

A couple of years ago quite an attractive grove was made in the rear of the buildings used for the most disturbed patients, where they are able to go for air and exercise without disturb-

ing the more quiet ones. While this grove has been very useful, its usefulness would be much increased if it were provided with a summer house. A suitable one could be built for about \$600.

REPAIRS TO COTTAGES

The cottages, which were very cheaply built, are now in need of extensive repairs. The verandas need repairs; all of the steps should be rebuilt, and many of the floors in the day rooms, dining-rooms, kitchens and corridors should be relaid. The ceilings and walls in almost every cottage need attention. The repairs to verandas will cost \$400, the new steps \$720, while much or little could be spent upon the floors, ceilings and walls. An apportionment of \$6,000 would enable us to put three or four of the cottages in good repair, and if a like sum were appropriated another year, they could be all put in excellent shape.

WELLS AT THE COTTAGES

Only four of the cottages are supplied with wells, so that it is still necessary to carry water to those without them. An expenditure of \$1,500 would probably be sufficient to provide the four additional ones needed.

ENLARGING COAL SHED

The coal shed at the Falkill dam should be enlarged so that it would not be necessary to cart coal there throughout the entire year; \$1,000 will be sufficient for the purpose.

ENCLOSED VERANDAS AT COTTAGES 4 AND 5

The two cottages above-mentioned are now devoted to the care of tuberculosis patients, who should be provided with fresh air and sunlight. Two porches, two stories high, which could be properly enclosed in winter, could be built for \$1,432.40.

ENLARGING NURSES' COTTAGE

By extending this cottage to the rear additional accommodations could be obtained for 30 or 40 attendants who now occupy rooms on the wards. The rooms thus vacated would increase

the capacity for patients to the same extent. The cost of this addition, ready for occupancy, would be about \$9,800.

ADDITIONAL ACCOMMODATIONS

If it is thought best to increase our accommodations for 250 patients, it can be done at a per capita cost of less than \$250 (which is only half the usual allowance) by erecting a superintendent's residence, a staff house, an amusement hall and an addition to the nurses' cottage. This would certainly be a very economical measure and a desirable one in every way.

RELIGIOUS SERVICE

Religious services have been regularly held by clergymen of various denominations, and all calls to minister to the sick and dying have been promptly and willingly responded to. Services for the deaf-mutes were also held by the Rev. Thomas Gallaudet on June 9th.

ACKNOWLEDGMENTS

Our grateful acknowledgments are due to the Amrita Club, Miss Catherine Newbold, the Hospital Book and Newspaper Society and the Sailors' Snug Harbor for the donation of books and periodicals, and to Mr. Bernard Gallagher of Brooklyn, N. Y., who generously donated \$50 for the purpose of purchasing Christmas presents for the patients without friends. If the public could but realize how much happiness such thoughtful acts bring to those whose lives have but little brightness at the best, I am sure that our list of acknowledgments would be much longer than it is. With all the safeguards which surround gifts to State institutions, it seems strange that wealthy philanthropists do not oftener make use of such avenues in carrying out their humanitarian desires.

VISITATION

The hospital has been regularly visited by the managers, the State Commission in Lunacy and representatives of the State Charities Aid Association. Governor Odell, accompanied by

several members of the Senate and Assembly, also made an inspection early in the summer in pursuit of his policy to familiarize himself with the work and the needs of the various charitable institutions of the State.

CONCLUSION

It is difficult to find new forms of expression to convey my appreciation of the encouragement and assistance which I receive so continuously from the managers, the Commission in Lunacy, my associate officers and the employees in general.

But I cannot let the opportunity pass without saying that I fully appreciate, and cheerfully acknowledge, my indebtedness to all those who have in any way helped to lighten the burdens of the year.

Respectfully submitted.

CHARLES W. PILGRIM

Medical Superintendent

December 21, 1901

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900	982	1,109	2,091
Admitted during year ending Sept. 30, 1901:			
On original commitments:			
From residences.....	231	220	451
From county houses	5	3	8
By transfers from other institutions for insane	10	5	15
Total number under treatment during year.	1,228	1,337	2,565
Daily average population.....	979	1,110	2,089
Capacity of institution	998	1,057	2,055
Discharged during the year:			
As recovered.....	93	73	166
As improved.....	29	37	66
As unimproved.....	19	9	28
Died	110	101	211
Whole number discharged during the year.	251	220	471
Remaining October 1, 1901.....	977	1,117	2,094

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening.....	Oct. 21, 1871
Total acreage of grounds and buildings	756 $\frac{35}{100}$
Value of real estate, including buildings.....	\$2,421,287 78
Value of personal property	222,352 23
Acreage under cultivation	655

Receipts during year, maintenance fund :

Balance on hand October 1, 1900.....	\$181 24
From State Treasury for maintenance on estimates 1 to 12 inclusive	370,280 00
From private patients.....	13,446 61
From reimbursing patients	14,561 44
From all other sources (including \$9,790.07 trans- ferred from clothing manufacturing account)...	11,878 46

Total receipts for maintenance	\$410,347 75
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Total receipts from State Commission in Lunacy for extraordinary improvements.....	\$29,615 80
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Disbursements during year for maintenance :

Estimate No. 1. For officers' salaries	\$20,786 04
Estimate No. 2. For wages	125,334 74
Estimate No. 3. For provisions and stores	126,574 82
Estimate No. 4. For ordinary repairs.....	7,094 19
Estimate No. 5. For farm and grounds	9,454 10
Estimate No. 6. For clothing	15,111 75
Estimate No. 7. For furniture and bedding	8,020 83
Estimate No. 8. For books and stationery.....	2,704 20
Estimate No. 9. For fuel and light.....	41,970 92
Estimate No. 10. For medical supplies	3,204 68
Estimate No. 11. For miscellaneous expenses.....	12,692 59
Estimate No. 12. For transportation	5,412 65

Total disbursements, estimates 1 to 12 inclu- sive	\$378,361 51
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Table No. 2—(Concluded)

Total disbursements clothing manufacturing fund paid from maintenance.....	\$160 00
Total disbursements under Chapter 580, Laws of 1899.....	28,266 93
Total	<u>\$406,788 44</u>
Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy	<u>\$39,615 80</u>
Balances October 1, 1901:	
General maintenance fund.....	<u>\$3,559 31</u>
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive	<u>\$3 47</u>
Maximum rate of wages paid attendants:	
Men.....	\$33 00
Women	<u>28 00</u>
Minimum rate of wages paid attendants:	
Men.....	\$20 00
Women	<u>14 00</u>
Proportion of day attendants to average daily population ...	1 to 9
Proportion of night attendants to average daily population ...	1 to 53
Percentage of daily patient population engaged in some kind of useful occupation	<u>73</u>
Estimated value of farm and garden products during year	\$24,407 12
Estimated value of articles made or manufactured by patients during year.....	<u>27,448 48</u>

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.).....	19	23	42	7	4	11	4
Mental strain, worry and overwork (not included in above)	11	13	24	5	12	17	2
Religious excitement.....	5	5	10	....	3	3	....
Love affairs (including seduction)	1	6	7	....	....	....	....
Fright and nervous shock .....	....	2	2	....	1	1	....
Physical:							
Intemperance	73	12	85	16	5	21	17
Sexual excess	1	....	1	....	....	....	....
Venereal diseases.....	8	4	12	1	1	2	2
Masturbation.....	18	1	19	5	....	5	1
Sunstroke.....	7	1	8	....	1	1	1
Accident or injury.....	12	2	14	4	1	5	1
Parturition and puerperium.....	....	11	11	....	5	5	1
Change of life .....	....	19	19	....	7	7	....
Fevers	2	4	6	....	1	1	1
Privation and overwork ...	3	7	10	3	1	4	2
Epilepsy.....	13	10	23	4	4	8	4
Diseases of skull and brain.	5	5	10	1	1	2	2
Old age	14	19	33	2	3	5	1
Epidemic influenza.....	11	4	15	4	....	4	....
Abuse of drugs.....	1	1	2	....	1	1	1
All other bodily disorders and ill health.....	5	12	17	4	2	6	....
Heredity	19	34	53	17	32	49	....
Congenital defect	8	13	21	....	3	3	6
Unascertained.....	10	20	30	....	3	3	8
Total.....	246	228	474	73	91	164	54

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious....	5	1	1	69	14	28
Mania, acute.....	45	54	6	975	506	118
Mania, recurrent.....	20	10	.....	142	55	9
Mania, chronic.....	30	.....	15	417	10	102
Melancholia, acute.....	106	93	15	1,690	821	199
Melancholia, simple....	12	4	.....	130	45	9
Melancholia, chronic....	59	.....	32	482	23	184
Alternating (circular) in- sanity.....	3	.....	1	6	.....	1
Paranoia.....	10	.....	.....	92	.....	9
General paralysis.....	35	.....	28	393	.....	284
Dementia, primary.....	1	.....	.....	49	.....	16
Dementia, terminal.....	107	.....	101	1,855	22	820
Epilepsy with insanity...	23	2	7	321	4	69
Imbecility with maniacal attacks.....	18	2	5	210	6	34
Idiocy.....	.....	.....	.....	4	.....	.....
Not insane*.....	.....	.....	.....	47	.....	.....
Total.....	474	166	211	6,882	1,506	1,882

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month.....	41	31	72	3	1	4	309	219	528	14	7	21
One to three months	27	13	40	15	12	27	200	183	383	152	68	220
Three to six months	9	14	23	33	25	58	94	105	199	277	222	499
Six to nine months	4	4	8	17	17	34	58	40	98	152	152	304
Nine months to one year ..	4	5	9	10	6	16	32	28	60	71	83	154
One year to eighteen months.	3	2	5	8	6	14	24	25	49	94	83	177
Eighteen months to two years	1	2	3	3	3	6	13	14	27	17	23	40
Two to three years.....	3	2	5	3	3	6	19	18	37	26	25	51
Three to four years	1	.....	1	1	.....	1	7	9	16	18	12	30
Four to five years .....	.....	.....	.....	.....	.....	.....	5	5	10	4	4	8
Five to ten years .....	.....	.....	.....	.....	.....	.....	11	8	19	1	1	2
Ten to twenty years .....	.....	.....	.....	.....	.....	.....	2	2	4	.....	.....	.....
Unascertained.....	.....	.....	.....	.....	.....	.....	52	24	76	.....	.....	.....
Total.....	93	73	166	93	73	166	826	680	1,506	826	680	1,506

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases :						
Typhoid fever.....	3	2	5	12	6	18
Scarlet fever.....				1	....	1
Influenza				13	15	28
Erysipelas				6	14	20
Septicemia and pyemia.....				1	....	1
Dysentery	4	10	14	8	18	26
Malarial affections		1	1	.....	3	3
Syphilis					4	4
Tuberculosis.....	15	20	35	120	96	216
Constitutional diseases :						
Scurvy, purpura and haemophilia ..				1	....	1
Diseases of the digestive system :						
Mouth, salivary glands, pharynx, tonsils and œsophagus .....				.....	1	1
Diseases of the stomach	2	1	3	3	3	6
Diseases of the intestines.....	3	7	10	11	53	64
Diseases of the liver	2	...	2	4	5	9
Diseases of the peritoneum				3	4	7
Diseases of the respiratory system :						
Diseases of the bronchi.....				3	3	6
Diseases of the lungs.....	6	10	16	113	81	194
Diseases of the pleura.....				2	2	4
Diseases of the circulatory system :						
Diseases of the heart.....	17	6	23	62	81	143
Arterio-sclerosis.....	4	9	13	11	19	30
Aneurism.....				2	2	4
Diseases of the blood and ductless glands :						
Hodgkin's disease, Addison's dis- ease and myxœdema.....				1	1	2
Diseases of the genito-urinary system	4	4	8	22	16	38
Diseases of the nervous system :						
Diseases of the spinal cord.....				.....	3	3
Diseases of the meninges		2	2	8	10	18
Organic diseases of the brain (tumor, abscess, embolism, throm- bosis, hemorrhage and other gross lesions).....	11	2	13	53	73	126

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the nervous system (<i>con.</i>):						
Functional nervous diseases (paral- ysis agitans, chorea, eclampsia, hysteria, neurasthenia)				1	....	1
Epilepsy	3	....	3	31	25	56
Mental diseases:						
Exhaustion of acute mental disease.				17	37	54
Exhaustion of chronic mental dis- ease	3	5	8	138	122	260
General paralysis of the insane....	23	2	25	244	39	283
The intoxications; heat-stroke; obesity:						
Opium habit				1	1	2
Heat-stroke	2	....	2	3	....	3
Debility of old age	8	17	25	108	104	212
Accident		1	1	2	2	4
Suicide				7	3	10
Surgical and gynecological diseases and diseases of the skin		2	2	....	6	6
Malignant new growths or cancer....				6	12	18
Total	110	101	211	1,018	864	1,882

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	32	30	62	278	242	520
Maternal branch	38	25	63	286	377	663
Paternal and maternal branches	19	15	34	88	120	208
Collateral branches.....	20	17	37	279	293	572
No hereditary tendency..	117	107	224	886	882	1,768
Unascertained	20	34	54	1,734	1,417	3,151
Total	246	228	474	3,551	3,331	6,882

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	119	79	198	1,757	1,226	2,983
Married	108	97	205	1,455	1,412	2,867
Widowed.....	17	51	68	283	633	916
Divorced .....	.....	1	1	15	16	31
Unascertained	2	.....	2	41	44	85
Total	246	228	474	3,551	3,331	6,882

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	5	2	7	82	14	96
Academic	15	11	26	141	130	271
Common school	196	167	363	2,436	2,253	4,689
Read and write	5	7	12	182	31	213
Read only	6	12	18	185	285	470
No education	15	28	43	325	342	667
Unascertained	4	1	5	200	276	476
Total	246	228	474	3,551	3,331	6,882

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	4	6	10	13	10	23	66	85	151	163	119	282
One to three months	11	8	19	17	13	30	102	106	208	142	119	261
Three to six months	9	10	19	10	10	20	76	68	144	118	117	235
Six to nine months	7	9	16	3	7	10	52	57	109	71	60	131
Nine months to one year	3	1	4	2	3	5	28	27	55	69	54	123
One year to eighteen months..	18	7	25	14	8	22	116	67	183	116	97	213
Eighteen months to two years.	3	2	5	5	5	10	19	16	35	41	44	85
Two to three years	8	13	21	6	17	23	109	74	183	94	79	173
Three to four years	9	10	19	8	10	18	57	48	105	56	61	117
Four to six years	12	5	17	12	3	15	72	55	127	65	52	117
Six to ten years	7	5	12	13	12	25	55	42	97	68	42	110
Ten to twenty years	11	17	28	7	2	9	80	102	182	15	17	32
Twenty years and over	8	8	16	.....	1	1	70	62	132	.....	3	3
Unascertained .....	.....	.....	.....	.....	.....	.....	116	55	171	.....	.....	.....
Total	110	101	211	110	101	211	1,018	864	1,882	1,018	864	1,882
Average duration of insane life (giving years and tenths) .....	.....	.....	.....	7.2	6.6	6.9	.....	.....	.....	11.5	12.6	12.05

TABLE No. 12

Showing ages of those admitted during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years .....				...	1	1
From 10 to 15 years				9	10	19
From 15 to 20 years	13	6	19	121	97	218
From 20 to 25 years	19	19	38	266	228	494
From 25 to 30 years	29	32	61	416	344	760
From 30 to 35 years	39	24	63	447	370	817
From 35 to 40 years	27	26	53	455	369	824
From 40 to 50 years	50	39	89	740	690	1,430
From 50 to 60 years	30	33	63	528	560	1,088
From 60 to 70 years	22	32	54	310	361	671
From 70 to 80 years	11	13	24	208	220	428
From 80 to 90 years	6	4	10	45	74	119
From 90 to 100 years				6	7	13
Total	246	228	474	3,551	3,331	6,882

TABLE No. 13

Showing ages of those discharged recovered during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years	2	4	6	42	32	74
From 20 to 30 years	20	28	48	223	196	419
From 30 to 40 years	28	19	47	226	208	434
From 40 to 50 years	26	16	42	189	136	325
From 50 to 60 years	15	6	21	101	85	186
From 60 to 70 years	2	.....	2	39	19	58
From 70 to 80 years .....	.....	.....	.....	6	4	10
Total	93	73	166	826	680	1,506

TABLE No. 14

Showing ages of patients who died during the current year and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years.....	1	1	2	8	8	16
From 20 to 25 years.....	1	1	2	23	30	53
From 25 to 30 years....	8	6	14	51	40	91
From 30 to 35 years.....	5	12	17	64	54	118
From 35 to 40 years.....	9	4	13	92	47	139
From 40 to 50 years.....	25	11	36	204	143	347
From 50 to 60 years.....	17	15	32	175	143	318
From 60 to 70 years.....	20	24	44	176	175	351
From 70 to 80 years.....	16	21	37	167	148	315
From 80 to 90 years....	8	5	13	53	66	119
From 90 to 100 years....	.....	1	1	5	10	15
Total	110	101	211	1,018	864	1,882

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month.....	50	41	91
One to three months.....	36	36	72
Three to six months.....	29	24	53
Six to nine months.....	20	12	32
Nine months to one year ..	12	9	21
One year to eighteen months....	20	13	33
Eighteen months to two years.....	10	6	16
Two to three years.....	20	20	40
Three to four years.....	10	10	20
Four to five years.....	5	7	12
Five to ten years.....	13	17	30
Ten to fifteen years.....	9	15	24
Fifteen to twenty years.....	5	8	13
Twenty to thirty years.....	5	5	10
Thirty years and upwards.....	2	5	7
Total.....	246	223	474

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.....	22	15	37
One to three months	40	52	92
Three to six months	38	43	81
Six to nine months.....	47	37	84
Nine months to one year	32	33	65
One year to eighteen months.....	100	112	212
Eighteen months to two years.....	72	115	187
Two to three years.....	55	215	270
Three to four years	82	136	218
Four to five years	64	123	187
Five to ten years	290	194	484
Ten to fifteen years	119	38	157
Fifteen to twenty years.....	12	3	15
Twenty to thirty years	4	1	5
Total.....	977	1,117	2,094

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.....	8	.....	8	113	.....	113
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.....	33	.....	33	502	.....	502

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Agricultural and pastoral : Farmers, gardeners, herdsmen, etc.	25	.....	25	470	....	470
Mechanics at outdoor vocations : Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc	48	.....	48	583	.....	583
Mechanics etc., at sedentary vocations : Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.	28	.....	28	410	.....	410
Domestic service : Waiters, cooks, servants, etc.....	2	80	82	86	1,142	1,228
Educational and higher domestic duties : Governesses, teachers, students, housekeepers, nurses, etc.....	....	100	100	30	1,628	1,658
Commercial : Shopkeepers, saleswomen, stenographers, typewriters, etc.....	....	2	2	....	47	47
Employed in sedentary occupation : Tailoresses, seamstresses, bookbinders, factory workers, etc.....	....	26	26	....	283	283
Miners, seamen, etc.....	....	....	....	8	....	8
Prostitutes .....	....	....	....	....	3	3
Laborers	86	.....	86	1,142	.....	1,142
No occupation	16	20	36	176	183	359
Unascertained .....	....	....	....	31	45	76
Total	246	228	474	3,551	3,331	6,882

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Africa				1		1
Armenia				1		1
Austria	2	1	3	22	10	32
Bavaria		1	1	1	1	2
Bahama Islands				1		1
Bohemia				5	2	7
Belgium				2		2
Canada	4	5	9	59	53	112
Cuba		3	3	1	6	7
Denmark		2	2	8	11	19
England	5	7	12	100	76	176
Finland				1	3	4
France	1		1	21	15	36
Germany	12	12	24	259	305	564
Greece				2		2
Holland		1	1	6	4	10
Hungary	2		2	14	8	22
Ireland	35	50	85	519	858	1,377
Italy	1	4	5	31	16	47
India				1	1	2
Japan				2		2
Mexico				1		1
Norway				7	3	10
New Brunswick				1	3	4
Nova Scotia				3	3	6
Philippine Islands				1		1
Poland				23	10	33
Russia	2	4	6	30	21	51
Scotland	1		1	26	25	51
Sweden		1	1	14	27	41
Switzerland		1	1	15	13	28
Wales				7	7	14

Table No. 18—(Concluded)

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
West Indies				5	.....	5
United States	181	136	317	2,285	1,776	4,061
Unascertained				76	74	150
Total	246	228	474	3,551	3,331	6,882

Of the total number admitted since the 1st of October, 1888, the parents of 50.40 per cent were both of foreign birth.

In 4.07 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 3.05 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany	116	1	117
Allegany			
Broome			
Cattaraugus			
Cayuga			
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia	15		15
Cortland			
Delaware			
Dutchess	83	4	87
Erie			
Essex			
Franklin			
Fulton			
Genesee			
Greene	18		18
Hamilton			
Herkimer			
Jefferson			
Kings	2		2
Lewis			
Livingston			
Madison			
Monroe			
Montgomery			
New York	8	1	9
Niagara			
Oneida			
Onondaga			
Ontario			
Orange			
Orleans			
Oswego			
Otsego			
Putnam	10		10
Queens	1		1
Rensselaer	93		93
Richmond	4		4
Rockland			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
St Lawrence.....			
Saratoga.....			
Schenectady.....	1		1
Schoharie.....			
Schuyler.....			
Seneca.....			
Steuben.....			
Suffolk.....			
Sullivan.....			
Tioga.....			
Tompkins.....			
Ulster.....	1		1
Warren.....	1		1
Washington.....	15		15
Wayne.....			
Westchester.....	96	4	100
Wyoming.....			
Yates.....			
Soldiers' Home.....			
Total.....	464	10	474

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany.....	142	155	297	2	2	4
Allegany.....						
Broome.....	1		1			
Cattaraugus.....						
Cayuga.....						
Chautauqua.....						
Chemung.....				1		1
Chenango.....						
Clinton.....	2		2			
Columbia.....	44	46	90	2	1	3
Cortland.....						
Delaware.....		1	1			
Dutchess.....	169	147	316	3	4	7
Erie.....						
Essex.....						
Franklin.....						
Fulton.....						
Genesee.....						
Greene.....	29	20	49	1		1
Hamilton.....						
Herkimer.....						
Jefferson.....						
Kings.....	7	3	10	1	3	4
Lewis.....						
Livington.....						
Madison.....						
Monroe.....						
Montgomery.....						
New York.....	26	216	242	2	9	11
Niagara.....						
Oneida.....						
Onondaga.....		1	1			
Ontario.....						
Orange.....	1	2	3			
Orleans.....						
Oswego.....						
Otsego.....						
Putnam.....	15	18	33	1		1
Queens.....	63	69	132			
Rensselaer.....	152	162	314		1	1
Richmond.....	42	41	83	5		5

Table No. 20—(Concluded)

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Rockland.....	1	.....	1	.....	.....	.....
St Lawrence.....	.....	.....	.....	.....	.....	.....
Saratoga.....	1	2	3	.....	.....	.....
Schenectady.....	1	.....	1	.....	.....	.....
Schoharie.....	1	.....	1	.....	.....	.....
Schuyler.....	.....	.....	.....	.....	.....	.....
Seneca.....	.....	.....	.....	.....	.....	.....
Steuben.....	.....	.....	.....	.....	.....	.....
Suffolk.....	14	10	24	.....	.....	.....
Sullivan.....	.....	.....	.....	.....	.....	.....
Tioga.....	.....	.....	.....	.....	.....	.....
Tompkins.....	.....	.....	.....	.....	.....	.....
Ulster.....	31	18	49	.....	1	1
Warren.....	1	.....	1	.....	.....	.....
Washington.....	23	20	43	.....	.....	.....
Wayne.....	.....	.....	.....	.....	.....	.....
Westchester.....	190	157	347	3	8	11
Wyoming.....	.....	.....	.....	.....	.....	.....
Yates.....	.....	.....	.....	.....	.....	.....
Unascertained.....	.....	.....	.....	.....	.....	.....
Total.....	956	1,088	2,044	21	29	50

REPORT OF THE STEWARD

To the Medical Superintendent

The following report of farm and garden products and stock on hand for the year ending September 30, 1901, is respectfully submitted:

FARM AND GARDEN PRODUCTS

Apples, barrels	120
Asparagus, bunches	1,519
Blackberries, quarts	511
Beef, pounds	2,233
Broilers, pounds	31 $\frac{1}{2}$
Beets, bushels	1,976 $\frac{1}{2}$
Beet greens, bushels.....	42
Beans, butter, bushels.....	1,405 $\frac{1}{4}$
Beans, Lima, bushels	154
Currants, quarts	476
Cherries, Michigan, quarts.....	84
Carrots, bushels	1,165
Corn, sweet, dozens.....	11,706 $\frac{1}{2}$
Cabbage, heads	42,969
Cauliflower, heads	250
Celery, bunches	10,492
Cucumbers	133,662
Cucumbers, pickles, bushels	23 $\frac{1}{2}$
Calves	32
Corn, field, bushels.....	200
Duck, pounds	570
Ensilage, tons	171 $\frac{1}{4}$
Eggs, hen, dozens.....	120 $\frac{1}{4}$
Eggs, duck, dozens.....	54
Eggplant	157
Grapes, pounds	7,011
Hay, tons	145 $\frac{1}{4}$

Hides	5
Kale, bushels	126
Lettuce, bushels	18
Lettuce, bunches	31.465
Leeks, bunches	1.380
Melons, musk	2.476
Melons, water	684
Mint, bunches	117
Milk, quarts	171.595
Mushrooms, quarts	17½
Manure, tons	1.200
Oats, bushels	20
Onions, early, bunches	12.965
Onions, early, bushels.....	91½
Onions, late, bushels.....	416
Okra, quarts	180
Pumpkins	1.190
Pears, bushels	49
Peppers	24.426
Potatoes, bushels	400
Parsley, bunches	14.797
Parsnips, bushels	61
Peas, bushels	465¼
Rhubarb, bunches	4.565
Raspberries, black, quarts.....	1.974
Raspberries, white, quarts.....	227
Raspberries, red, quarts	1.329
Rye, bushels	618
Radishes, bunches	24.417
Radishes, bushels	135
Radishes, winter, bushels.....	45
Radish, horse, pounds.....	293
Strawberries, quarts	5.555
Straw, tons	49
Spinach, bushels	638
Sprouts, brussels, bushels.....	11½

Salsify, bushels	36
Squash, early, bushels.....	21½
Sage, bunches	25
Turnips, bushels	1,060
Tomatoes, bushels	2,212½

FARM STOCK

Horses	30
Colts	2
Cows	68
Heifers, two-year olds.....	11
Heifers, one-year olds.....	6
Heifers, calves	8
Bulls	2
Hens	32
Ducks	43

ARTICLES MADE IN MATRON'S DEPARTMENT

Attendants' caps	979
Aprons, white	1,079
Billiard table covers	37
Baby bands	6
Baby toilet napkins.....	44
Bibs	108
Bureau covers	54
Chemises	886
Clothes bags	151
Cooks' caps	78.
Corset covers	35
Dresses, gingham	1,566
Dresses, gingham, strong.....	194
Drawers, muslin	1,040
Dusters	162
Kitchen aprons	430
Pillow cases	1,644

STATE COMMISSION IN LUNACY

649

Hats, trimmed	12
Protection sheets	75
Sheets	1,739
Skirts, canton flannel.....	279
Skirts, seersucker	518
Shrouds	169
Shirt waists	39
Sofa pillows	76
Screen covers	6
Sideboard covers	8
Tablecloths	503
Table napkins	359
Table covers	22
Table pads	2
Towels, hand	1,080
Towels, bath	3,163
Towels, dish	1,262
Towels, roller	74
Window curtains	186
Rugs	50
Neckties for women.....	380
Neckties for men.....	66
Night gowns	420
Night shirts	153

Articles Repaired

Pieces	20,054
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ARTICLES MADE IN TAILORING DEPARTMENT

Coats	909
Vests	953
Trousers	1,053
Overalls	253
Overcoats	38
Jumpers	81
Strong suits	134

Duck coats	172
Linen coats	173
Jean coats	192
Ezperanza coats	52
Check coats	14
Band suits	16
Night shirts	123
Strong blankets	6
Shades cut	205

Articles Repaired

Pieces	10,530
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ARTICLES MADE IN SHOE SHOP

Men's elastic shoes, pairs.....	179
Men's buckle shoes, pairs.....	277
Men's lace shoes, pairs.....	85
Men's lock shoes, pairs.....	43
Men's boots, pairs.....	4
Men's slippers, pairs.....	864
Women's lace shoes, pairs.....	57
Women's lock shoes, pairs.....	12
Women's slippers, pairs.....	53
Cripple shoes, pairs.....	15
Men's soles and heels.....	987
Women's shoes repaired, pairs.....	105
Slippers, pairs, repaired.....	391

ARTICLES MADE IN BRUSH AND BROOM SHOP

Brooms, common, dozens.....	218
Brooms, whisk, dozens.....	44
Brushes, clothes, dozens.....	10
Brushes, scrub, dozens.....	42
Brushes, floor polishing, dozens.....	20
Brushes, bath, dozens.....	30

Brushs, hair, dozens.....	25
Brushes, nail, dozens.....	17
Brushes, sink, dozens.....	10
Brushes, vegetable, dozens.....	7
Brushes, pope head, dozens.....	6
Dusters, counter, dozens.....	7

ARTICLES MADE AND REPAIRED IN UPHOLSTERING
DEPARTMENT—MATTRESS MAKING, ETC.

Single hair mattresses	922
Double hair mattresses.....	10
Canvas mattresses	25
Hair pillows	624
Feather pillows	50
Sofa pillows	40
Clothes bags	45
Hassocks	11
Davenport sofa	1
Turkish lounge	1
Turkish chair	1
Corduroy Morris chair cushions.....	16
Mangle covers, complete sets.....	7
Leather settees, repaired.....	12
Leather chairs, repaired.....	38
Lounges repaired	4
Sofa repaired	1
Leather Morris chair cushions.....	6
Window seat	1
Box spring	1
Large awnings	4
Small awnings	4

Chair Caning

Common chairs	100
Large rockers	42
Large chairs	12

Matting

Brush door mats.....	50
Bag door mats.....	20

Harness Making, Etc.

Harness, single, sets.....	2
Breechings, set	1
Ankle boots, pairs.....	2
Girths	8
Coach reins, set.....	1
Cow straps	15
Halters	7
Double reins, sets.....	2
Bridle fronts	4
Throat latches	2
Check reins	2
Hame straps	25
Spreader straps	8
Breast straps	8
Heavy felt pads	3
Light felt pads	3
Wagon cushions	3
Tie straps	7
Martingales, pairs	4
Side straps, pairs.....	4
Straps on reins.....	4
Hame tugs, set.....	1

Harness Repaired

Blankets	30
Checks	2
Collars relined	6
Surcingles	6
Halters	9
Wagon cushion	1
Nose band	1

Thills releathered	2
Whips	15
Bridles	8
Blankets relined	4
Blankets strapped	6
Cross reins	6
Curtains	6
Back pads	4
Sweat pads, pair.....	1
Traces, pairs	8
Common straps	9
Collars	11
Cow straps	10
Double reins, pairs.....	10
Breechings, pairs	6

MAINTENANCE PER CAPITA COST PER WEEK

	Payments	Per capita cost
For officers' salaries.....	\$20,786 04	\$0 19
For wages	125,334 74	1 15
For provisions and stores.....	126,574 82	1 16
For ordinary repairs.....	7,094 19	6
For farm and grounds.....	9,454 10	9
For clothing	15,111 75	14
For furniture and bedding.....	8,020 83	7
For books and stationery.....	2,704 20	2
For fuel and light.....	41,970 92	39
For medical supplies	3,204 68	3
For miscellaneous expenses.....	12,692 59	12
For transportation of patients.....	5,412 65	5
Total	\$378,361 51	\$3 47
Per capita cost for 1900.....		\$3 46

Rendered October 30, 1901.

L. P. GILLESPIE

Steward

Managers of the Hudson River State Hospital
The first meeting of the Board of Managers was held March 28, 1867

NAME	Residence	Commencement of term	Expiration of term	Remarks
Abiah W. Palmer	Amenia	March 19, 1867	March 19, 1873	
William Kelly	Rhinebeck	March 19, 1867	March 19, 1873	
Cornelius R. Agnew	New York	March 19, 1867	March 19, 1872	Reappointed May, 1872.
Amasa J. Parker	Albany	March 19, 1867	March 19, 1872	Died 1868.
Dr. A. Cook Hull	Brooklyn	March 19, 1867	March 19, 1872	
Edward L. Beadle	Poughkeepsie	March 19, 1867	March 19, 1871	
George Clark	Newburgh	March 19, 1867	March 19, 1871	
Joseph Howland	Fishkill	March 19, 1867	March 19, 1871	
John P. H. Tallman	Poughkeepsie	March 19, 1867	March 19, 1871	Reappointed February, 1871. Mr. Tallman met with managers at their first meeting, but re- signed before next meeting and did not qualify.
Cornelius Du Bois	Poughkeepsie	March 19, 1867	March 19, 1871	In place of Mr. Tallman.
Dr. William C. Benedict	Brooklyn	July 29, 1868	January 25, 1869	In place of Dr. Cook Hull, deceased.
Joseph Howland	Fishkill	February 16, 1871	February 16, 1877	Reappointed, deceased.
Otiell S. Hathaway	Newburgh	March 2, 1871	March 2, 1877	In place of George Clark, term expired.
Charles Wheaton	Poughkeepsie	March 2, 1871	March 2, 1877	In place of Cornelius Du Bois, term expired.
James Roosevelt	Hyde Park	May 11, 1872	March 19, 1878	In place of William Kelly, deceased.
James Roosevelt	Hyde Park	May 11, 1872	March 19, 1878	Reappointed to succeed himself.
Amasa J. Parker	Albany	May 2, 1872	May 2, 1878	Reappointed to succeed himself.
Dr. Frederick D. Lente	Gold Spring	May 11, 1872	May 11, 1878	In place of Dr. Benedict, term expired.
Edward L. Beadle	Poughkeepsie	May 11, 1872	May 11, 1878	Reappointed to succeed himself.
Abiah W. Palmer	Amenia	April 12, 1874	April 16, 1879	Died April 16, 1879.
Thomas Newbold	Poughkeepsie	February 12, 1879	April 16, 1879	In place of James Roosevelt, resigned.
Charles F. Brown	Newburgh	July 26, 1877	July 25, 1883	In place of Otiell S. Hathaway.
Joseph Howland	Fishkill	July 26, 1877	July 25, 1883	Reappointed to succeed himself.
Charles Wheaton	Poughkeepsie	July 26, 1877	July 25, 1883	Reappointed to succeed himself.
Cornelius R. Agnew	New York	April 16, 1873	April 16, 1879	Reappointed to succeed himself.
Amasa J. Parker, Jr.	Albany	April 7, 1881	April 7, 1887	In place of Amasa J. Parker, resigned.
Jacob B. Carpenter	Little Rest	April 7, 1881	April 7, 1887	In place of A. W. Palmer, deceased.
John L. Platt	Poughkeepsie	April 7, 1881	April 7, 1887	In place of E. L. Beadle.
Charles H. Stott, Jr.	Stoughtonville	April 7, 1881	April 7, 1887	In place of Thomas Newbold.
Willard H. Mose	Mattewan	April 7, 1881	April 7, 1887	In place of F. D. Lente.
Cornelius R. Agnew	New York	April 7, 1881	April 7, 1887	Reappointed to succeed himself.
William B. Kipp	Rhinebeck	September 13, 1882	September 13, 1888	In place of Joseph Howland, resigned.
Cornelius R. Agnew	New York	May 16, 1882	May 16, 1888	Reappointed.
James Roosevelt	Hyde Park	February 21, 1883	February 21, 1889	In place of W. B. Kipp.
David B. Williamson	Dobbs Ferry	February 21, 1883	February 21, 1889	In place of C. F. Brown.
Henry W. Gilbert	Poughkeepsie	March 24, 1885	Resigned	In place of Charles Wheaton, term expired.
Charles P. McClellan	Dobbs Ferry	January 26, 1887	February 21, 1889	In place of D. B. Williamson, deceased.

Frank B. Lowndes.....	Poughkeepsie	April	24, 1888	April	24, 1894	In place of H. W. Gilbert, resigned.
Amasa J. Parker, Jr.....	Albany	April	24, 1888	May	9, 1894	Reappointed to succeed himself.
Dr. George F. Shady.....	New York	May	9, 1888	May	10, 1894	In place of C. B. A. Gnew, deceased.
John Sherry.....	Troy	May	10, 1888			
Lewis S. Chandler.....	Red Hook	August	17, 1892			In place of J. B. Carpenter, resigned.
Lewis S. Chanler.....	Red Hook	January	10, 1893			Reappointed to succeed himself.
James Roosevelt.....	Hyde Park	January	10, 1893	January	10, 1896	Reappointed to succeed himself.
Willard H. Mase.....	Madison	January	10, 1893			Died 1894.
Lewis S. Chanler.....	Red Hook	April	19, 1893	December	31, 1896	Reappointed to succeed himself.
Frank B. Lowndes.....	Poughkeepsie	January	10, 1893	December	31, 1896	Reappointed to succeed himself.
Hudson Taylor.....	Poughkeepsie	January	10, 1893	December	31, 1896	In place of John I. Platt, term expired.
John Sherry.....	Troy	March	7, 1894	December	31, 1896	Reappointed to succeed himself. Died 1895.
Charles T. McClellan.....	Dobbs Ferry	March	7, 1894	December	31, 1896	Reappointed to succeed himself.
Eugene N. Howell.....	Poughkeepsie	March	10, 1895	December	31, 1896	In place of W. H. Mase, deceased.
Dr. George F. Shady.....	New York	January	10, 1895	December	31, 1896	Reappointed to succeed himself.
Francis N. Mann.....	Troy	January	16, 1896	December	31, 1896	In place of John Sherry, deceased.
Henry M. Taylor.....	Poughkeepsie	January	16, 1896	December	31, 1896	In place of James Roosevelt, resigned.
Amasa J. Parker.....	Albany	January	16, 1896	December	31, 1896	Reappointed to succeed himself.
Under the provisions of section 31 of the Insanity Law, passed in 1896, the Governor appointed the following board of managers for the term commencing January 1, 1897:						
Myra H. Avery.....	Poughkeepsie	January	1, 1897	December	31, 1897	Term of one year.
Lewis E. Parker.....	Albany	January	1, 1897	December	31, 1898	Term of two years, in place of Amasa J. Parker, who declined another term.
Catherine A. Newbold.....	Poughkeepsie	January	1, 1897	December	31, 1899	Term of three years.
Eugene N. Howell.....	Poughkeepsie	January	1, 1897	December	31, 1900	Term of four years.
Hudson Taylor.....	Poughkeepsie	January	1, 1897	December	31, 1901	Term of five years.
Frank B. Lowndes.....	Poughkeepsie	January	1, 1897	December	31, 1902	Term of six years.
Henry M. Taylor.....	Poughkeepsie	January	1, 1897	Resigned		Term of seven years.
Isaac W. Sherrill.....	Poughkeepsie	June	22, 1897	January	25, 1898	In place of Henry M. Taylor, resigned.
Isaac W. Sherrill.....	Poughkeepsie	June	19, 1898	December	31, 1903	Reappointed to succeed himself.
Grace Carpenter Board.....	Poughkeepsie	February	12, 1898	December	31, 1904	In place of Myra H. Avery, term expired.
Lewis E. Parker.....	Albany	April	12, 1899	December	31, 1905	Reappointed to succeed himself.
Catherine A. Newbold.....	Poughkeepsie	January	16, 1900	December	31, 1906	Reappointed to succeed herself.
George Milton Hine.....	Poughkeepsie	January	16, 1901	December	31, 1907	In place of E. N. Howell, term expired.
Augustus B. Gray.....	Poughkeepsie	September	27, 1901			In place of Grace Carpenter Board, resigned.

Treasurers

(Ex officio Secretary of Board)

NAME	Date of appointment	Expiration of term
James H. Weeks.....	Jan. 29, 1867	Jan. 1, 1882
Richard Kenworthy*.....	Jan. 1, 1882	Feb. —, 1888
Henry W. Gilbert†.....	March —, 1888	July 1, 1890
Allison Butts.....	July 1, 1890	.....

Attorney

NAME	Date of appointment	Expiration of term
Henry M. Taylor.	July 1, 1897	.....

Superintendents

NAME	Appointed	Resigned
Joseph M. Cleveland, M. D.	March 28, 1876	March 28, 1893
Charles W. Pilgrim, M. D.	May 1, 1893	.....

Stewards

NAME	Appointed	Resigned
Robert Roberts*.....	Sept. 8, 1870	Feb. 12, 1885
James M. Morrison.....	May 6, 1885	Aug. 6, 1885
D. Porter Lord	Dec. 1, 1885	Aug. 1, 1898
Louis P. Gillespie.....	July 1, 1898	.....

* Died.

† Resigned.

Physicians

NAME	Appointed	Resigned
A. O. Kellogg, M. D.....	1871	1884
C. H. Langdon, M. D.....	1875	1880
J. Leonard Corning, M. D.....	1880	1882
C. H. Langdon, M. D.....	1882	.....
Frederick Peterson, M. D.....	1884	1888
Charles E. Atwood, M. D.....	1884	1888
Theo. H. Kellogg, M. D.....	1888	1891
Paul E. Tieman, M. D.....	1889	1890
Francis E. Scratchley, M. D.....	1889	1890
J. Elvin Courtney, M. D.....	1890	1891
John J. Kindred, M. D.....	1890	1891
Ralph W. Parsons, M. D.....	1890	1893
Caroline M. Pease, M. D.....	1890	1894
Selwyn A. Russell, M. D.....	1891	1894
Isham G. Harris, M. D.....	1891	.....
Thomas E. Bamford, M. D....	1893	.....
J. Elvin Courtney, M. D.....	1894	.....
Emma Putnam, M. D.....	1894	.....
Paul A. Phillips, M. D.....	1894	1896
F. A. Williams, M. D.....	1894	1895
H. E. Baright, M. D.....	1895	1897
Frederick J. Mann, M. D.....	1895	1899
J. O. Stranahan, M. D.....	1896	1900
Frederick T. Clark, M. D.....	1897	1900
Clarence J. Slocum, M. D.....	1897	1900
Samuel F. Mellen, M. D.....	1900	.....
John G. Elliott, M. D.....	1900	.....
Louis T. Waldo, M. D.....	1900	.....

THIRTY-FIRST ANNUAL REPORT
OF THE
MANAGERS
OF THE
Middletown State Homeopathic Hospital
AT MIDDLETOWN, N. Y.
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL

BOARD OF MANAGERS

UZAL T. HAYES, Esq., President.....	Middletown
Hon. WILLIAM K. STANSBURY, Vice-President..	Middletown
JOHN D. STIVERS, Esq., Secretary.....	Middletown
EDWARD D. TOMPKINS, Esq., Treasurer.....	Middletown
JOHN McE. WETMORE, M. D.....	41 East 29th St., New York
HENRY L. SLOTE, Esq.....	60 Murray St., New York
FREDERICK W. DEVOE, Esq.....	101 William St., New York
JAMES B. CARSON, Esq.....	Middletown
JOHN W. SLAUSON, Esq.....	Middletown
ROBERT B. HOCK, Esq.....	Goshen
SAMUEL E. SHIPP, Esq.....	Newburgh
EDWARD F. PIERSON, Esq.....	Ramapo

ATTORNEY

Hon. JOHN B. SWEZEY.....	Goshen
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OFFICERS

SELDEN H. TALCOTT, A. M., M. D., PH. D.,	
	Medical Superintendent
MAURICE C. ASHLEY, M. D.....	First Assistant Physician
ROBERT C. WOODMAN, M. D.....	Second Assistant Physician
DAVID E. FRANCISCO, M. D.....	Assistant Physician
EDWARD A. EVERETT, M. D.....	Assistant Physician
REEVE TURNER, M. D.....	Junior Physician
CLARA BARRUS, M. D.....	Woman Assistant Physician
Mr. HENRY J. LEONARD.....	Steward
Mrs. LUCY T. JUDSON.....	Matron
THOMAS M. THAYER, M. D.....	Interne

SUPERVISORS

Mr. WILBER E. COOK	Miss D. W. COMSTOCK
Mrs. WILBER E. COOK	Miss IRENE BENJAMIN

REPORT OF MANAGERS

To the State Commission in Lunacy

The managers of the Middletown State Homeopathic Hospital herewith present their thirty-first annual report for the year ending September 30, 1901. The treasurer's report, the superintendent's report, the statistical tables, the bureau of information and the industrial reports are also incorporated in the report of the managers.

COMMITTEES

The following committees have served during the past year:

Finance committee.—Messrs. Stansbury, Carson and Hayes.

Building committee.—Messrs. Hayes, Tompkins and Carson.

Visiting committee.—Dr. Wetmore, and Messrs. Stivers, Slote, Slauson, Snow, Pierson and Shipp.

The members of the finance committee have executed all contracts other than those pertaining to the duties of the farm and building committee. They have also carefully examined and audited the accounts of the treasurer.

The building committee has had the general charge and direction of the farm, and has considered all questions relating to the location, plans and erection of new buildings and the improvement of those already erected. The members of this committee have given much time to the consideration of contracts for new work, and they have opened and considered bids for supplies for the hospital.

The members of the visiting committee have made regular monthly inspections of the various wards of the hospital, and have reported the results of their observations at the meetings of the board. The board meets four times a year, viz: in March, June, September and December. The reports of the visiting committee show a thorough inspection of all the hospital buildings, and a generally satisfactory condition of affairs.

IMPROVEMENTS MADE DURING THE YEAR

During the past year we have completed the following improvements. The list is given in about the chronological order:

The waiting-room near the trolley was begun during the latter part of the last fiscal year, but was not completed until early this year. It is a small brick building, with a slate roof, and at the sides large windows which give plenty of light, and which can be removed for ventilation when necessary. It is very convenient for visitors to the hospital who have occasion to wait for a trolley car, and it is especially valuable during cold and stormy weather. The trolley company has been kind enough to place several electric heaters in the new structure. The cost of this waiting-room was \$436.72.

Two engines, directly connected with two 75-kilowatt volt generators, have been installed in the dynamo room, and new connections for live and exhaust steam have been made with the boilers and heaters. The total cost of this work was \$9,383.20. It was absolutely necessary that this work should be done, as our old dynamos were inadequate to perform the necessary work any longer. We now have capacity for all the electric power which we will probably need for several years.

A new steel ceiling has been put on the entrance hall to pavilion No. 1 in place of a plaster ceiling, which had frequently fallen. This makes the passageway much safer. The cost of this improvement was \$45.

In order to obtain for our patients a milk supply of unquestioned purity, a De Laval separator was installed in a room near the kitchen. This machine is run by a steam turbine motor, and it thoroughly cleanses the milk from all impurities. The separator and its necessary fittings cost \$569.35. It has a capacity of about 3,000 pounds per hour.

A new asbestos covering has been placed on the steam pipes in the basement of the main building. This improvement was required because the old covering had become thoroughly charred and broken from long use. The cost of the removal was \$127.68.

The corridors leading from pavilion No. 1 to Talcott hall and from pavilion No. 2 to annex No. 1 and from annex No. 1 to annex No. 2 were only one story high. This necessitated a great deal of running up and down stairs to get from one building to another. These corridors were raised another story last fall, and it has proved to be a great improvement in every respect. Now patients on the second floor can be removed from one building to another without having to take them up and down stairs, and the physicians in making their rounds can save both time and trouble. These three additional stories were put on for the very reasonable sum of \$1,990.

A bath tower has been added to the hospital wing of pavilion No. 1. This is a very important addition, and adds greatly to our facilities for taking care of hospital patients in a modern and sanitary manner. The cost of this building was about \$11,638.94.

The most expensive improvement that has been made during the year is a general and cold-storage building, which is attached to our kitchen. This is of brick, with a slate mansard and a tin roof. It will give us ample space for all our supplies, except vegetables, which are kept in cellars. This building is conveniently located for the reception of stores and their delivery to the kitchen. The cost was about \$17,412.39.

A large Berryman feed-water heater has been set up in the boiler house to supply the laundry with hot water. This, together with the one which we already had in use, will be ample to supply both our boilers and laundry with all the hot water which they may require, although both may be drawing at once. This heater cost \$583.25.

We have been enabled to secure a renewal of part of our badly worn carpets and furniture. Velvet carpets have been put down in thirty-four rooms in the main building—pavilion No. 2, annex No. 1, Talcott hall and Grinnell cottage. These carpets cost about \$1,058.54. We have also had some ward-robres, bureaus and chairs to replace those entirely worn out.

We have during the summer been obliged to put a new floor

in our carriage house, as the old one was in a dangerous condition. While this new floor was being put in the entire interior arrangements were changed and made more convenient and satisfactory. This cost \$212.99.

A new enameled iron bath tub was set up in the superintendent's house to replace one that was worn out. It cost \$33.58.

The heater which supplied Talcott hall with hot water became so badly corroded and leaky that it was necessary to replace it with a new one. We secured a Tobey hot-water heater with sufficient capacity to supply this building, and also to supply the three cottages near it whenever proper connections can be made. This heater cost \$425, and is in every way superior to the old one.

The nurses' home for women, Grinnell and Pierson cottages and the solarium attached to the main building have been repainted. The appearance of these buildings was thus very much improved. The cost of painting the four structures was \$465.

The brick chimney at the boiler house gave evidence that it was spreading at the top, and therefore we had it overhauled by an expert in that line. It is now in condition to last for many years longer. The cost of repairing this chimney was \$338.

Although our laundry was fairly well ventilated, it was difficult to keep it free from odors and cool enough for the comfort of the workers therein. Therefore a ventilating fan was placed near the washing machines. This works very well, and the welfare of our employees and patients is thus increased. This improvement was made at a cost of \$69.50.

While our cold-storage building is practically finished, the refrigerating apparatus has not yet been installed, but a contract has been entered into to complete the work for the sum of \$6,702, and we expect that it will soon be in operation. Refrigeration will be carried on by the absorption method, and the steam used will be the exhaust from the boiler house; consequently the expense of running the machine will be very small. In selecting the absorption system, economy in running the plant was carefully considered.

We have also an allowance for putting in a new cement floor in the dynamo room as soon as the refrigerating apparatus is in place; and likewise an allowance for making an addition to the kitchen, and bids for doing this work have been advertised for. These prospective improvements are very desirable, as they will complete the dynamo room and give much needed room in the kitchen.

IMPROVEMENTS FOR THE COMING YEAR

1. Solariums for pavilions Nos. 1 and 2, annexes Nos. 1 and 2, and Talcott hall.....	\$25,000
2. Rewiring, for electric lights, pavilions Nos. 1 and 2, annexes Nos. 1 and 2, and Talcott hall.....	20,000
3. Hospital wards for women, between cottages (capacity 60)	12,000
4. Overhauling water sections in pavilions Nos. 1 and 2	6,000
5. Stand pipe for water supply.....	5,000
6. Warren-Webster system of steam heating for two cottages and two homes for nurses.....	4,500
7. Mechanical stokers	3,500
8. Carpets, curtains, furniture, kitchen utensils, etc.	3,000
9. Two new greenhouses, to replace wornout ones..	3,000
10. One 150 horse-power boiler, with connections....	2,800
11. Raising roofs of laundry building and dynamo room	2,500
12. Fitting up dining-room for men in basement of annex No. 1 (cement floor and tile sides) to make room for about 35 or 40 beds on ward 25.	2,500
13. Painting buildings, exteriors	1,000
14. Electric fans for hospital wards.....	800
15. Grinnell fire extinguishers for cold-storage building	600

The necessity for the foregoing improvements is explained in the report of the superintendent.

IN MEMORIAM

On the third day of August, 1901, Hon. Grinnell Burt, president of the board of managers of this hospital, passed into the realms of eternal rest. When this institution was established, in 1874, Mr. Burt was made chairman of the farm and building committee. He also acted as vice-president until the death of Mr. Fletcher Harper in 1890, when he was unanimously elected to the presidency of the board.

Mr. Burt gave freely of his time and energy for the promotion of the interests of the institution, which came to be very dear to his heart. He was always ready to favor every plan which seemed likely to enhance the usefulness or enlarge the scope of this special and peculiar work. The restoration of the sick to health has been the highest aim of this hospital during all its existence, and no one has favored or fostered that object more fully or more energetically than our departed friend.

We desire to make a public record of Mr. Burt's work as exemplified by the upbuilding of the Middletown State Homeopathic Hospital. His active brain conceived much of benefit for the institution, and his guiding hand aided strenuously in the formation and the crystallizing of a glorious work. Honor to him who wrought so well in behalf of suffering humanity, and peace to his ashes.

CHANGES IN THE BOARD

Mr. Samuel E. Shipp, of Newburgh, was appointed to fill the vacancy occasioned by the resignation of Mr. McCroskery, and Mr. Edward F. Pierson, of Ramapo, was appointed to succeed Hon. W. W. Snow, who also resigned.

At the quarterly meeting held September 21, 1901, Mr. Uzal T. Hayes was elected to the presidency of the board to succeed Mr. Burt, deceased. Mr. Hayes served as vice-president for several years. Hon. William K. Stansbury was elected to the office of vice-president to succeed Mr. Hayes.

CONCLUSION

We desire to express our appreciation of the work which has been performed by the officers and employees of this hospital during another year. The admirable order, efficiency of service and good discipline which prevail throughout the institution are observed with great satisfaction.

Respectfully submitted.

UZAL T. HAYES, *President*
WILLIAM K. STANSBURY
JOHN D. STIVERS
EDWARD D. TOMPKINS
JOHN McE. WETMORE
HENRY L. SLOTE
FREDERICK W. DEVOE
JAMES B. CARSON
JOHN W. SLAUSON
ROBERT B. HOCK
SAMUEL E. SHIPP
EDWARD F. PIERSON

REPORT OF THE TREASURER

Receipts

Balance on hand October 1, 1900.....	\$135 36
From State treasury for maintenance on estimates 1 to 12, inclusive.....	217,002 55
From private patients.....	40,927 15
From reimbursing patients.....	13,396 37
From all other sources.....	4,172 96

Total receipts during the year..... \$275,634 39

Disbursements

For officers' salaries.....	\$17,311 68
For wages.....	78,342 49
For provisions and stores.....	78,677 19
For ordinary repairs.....	4,366 24
For farm and grounds.....	5,035 06
For clothing.....	5,631 49
For furniture and bedding.....	4,687 58
For books and stationery.....	1,126 94
For fuel and light.....	15,004 72
For medical supplies.....	1,099 69
For miscellaneous expenses.....	6,512 03
For transportation.....	1,585 59

Total disbursements, estimates 1

to 12, inclusive..... \$219,380 70

To State Treasurer, receipts as re-

quired by law..... 54,670 67

274,051 37

Balance on hand October 1, 1901..... \$1,583 02

Special Funds

Receipts

From State treasury, chapter 364, Laws 1900.....	\$13,967 36
From State treasury, chapter 322, Laws 1901.....	25,784 70
	<hr/>
	\$39,752 06
	<hr/> <hr/>

Disbursements

Vouchers paid during the year.....	\$39,752 06
	<hr/> <hr/>

Respectfully submitted.

EDWARD D. TOMPKINS

Treasurer

REPORT OF THE MEDICAL SUPERINTENDENT

To the Board of Managers

For the twenty-fifth time as medical superintendent I have the honor and the pleasure of presenting to you the annual report of the institution under my charge.

In accordance with our usual custom, we present just here a table showing the movement of the hospital population for the year ending September 30, 1901:

	Men	Women	Total
Remaining October 1, 1900.....	588	622	1,210
Admitted during the year ending Sept. 30, 1901:			
On original commitments:			
From residences.....	86	115	201
By transfers from county houses on original commitments.....	1	2	3
By transfers from other institutions for insane.	7	4	11
Total number under treatment during year..	682	743	1,425
Daily average population.....	598	645	1,243
Capacity of institution.....	566	534	1,100
Discharged during the year:			
As recovered.....	33	56	89
As improved.....	18	9	27
As unimproved.....	2	1	3
As not insane.....	1	.....	1
Died.....	36	32	68
Whole number discharged during the year.....	90	98	188
Remaining October 1, 1901.	592	645	1,237

Percentage of recoveries on number admitted.....	41.39
Percentage of recoveries on daily average population	7.16
Percentage of recoveries on whole number treated..	6.25

Percentage of recoveries on number discharged.....	47.34
Percentage of recoveries on recoverable cases admitted	68.61
Percentage of deaths on number admitted.....	31.63
Percentage of deaths on daily average population...	5.47
Percentage of deaths on whole number treated.....	4.77
Percentage of deaths on number discharged.....	36.17

Of the 215 patients admitted, 77 were over fifty years of age. Of this number, 31 were over sixty, and 12 were over seventy.

Of the 68 patients who died, 42 were over fifty years of age. Of this number, 27 were over sixty, 16 were over seventy, and 5 were over eighty.

It is a pleasure to note that the recovery rate compares favorably with the record of the past few years; and is, in fact, somewhat higher than that which has been attained during the past six years.

The death rate is the lowest we have been able to report during the past ten years, with one exception. The death rate for 1900 on the whole number treated was 4.66, which is a little lower than that of the past year. When we consider the fact that an accumulation of aged, chronic, and hopeless cases is inevitable, and that such cases must eventually die, we feel that the death rate for the past two years has been very moderate.

We believe that these results are due in a large measure to a practical freedom from dangerous epidemics, to rest in bed and other hospital methods and to the administration of medicines in compliance with homeopathic principles.

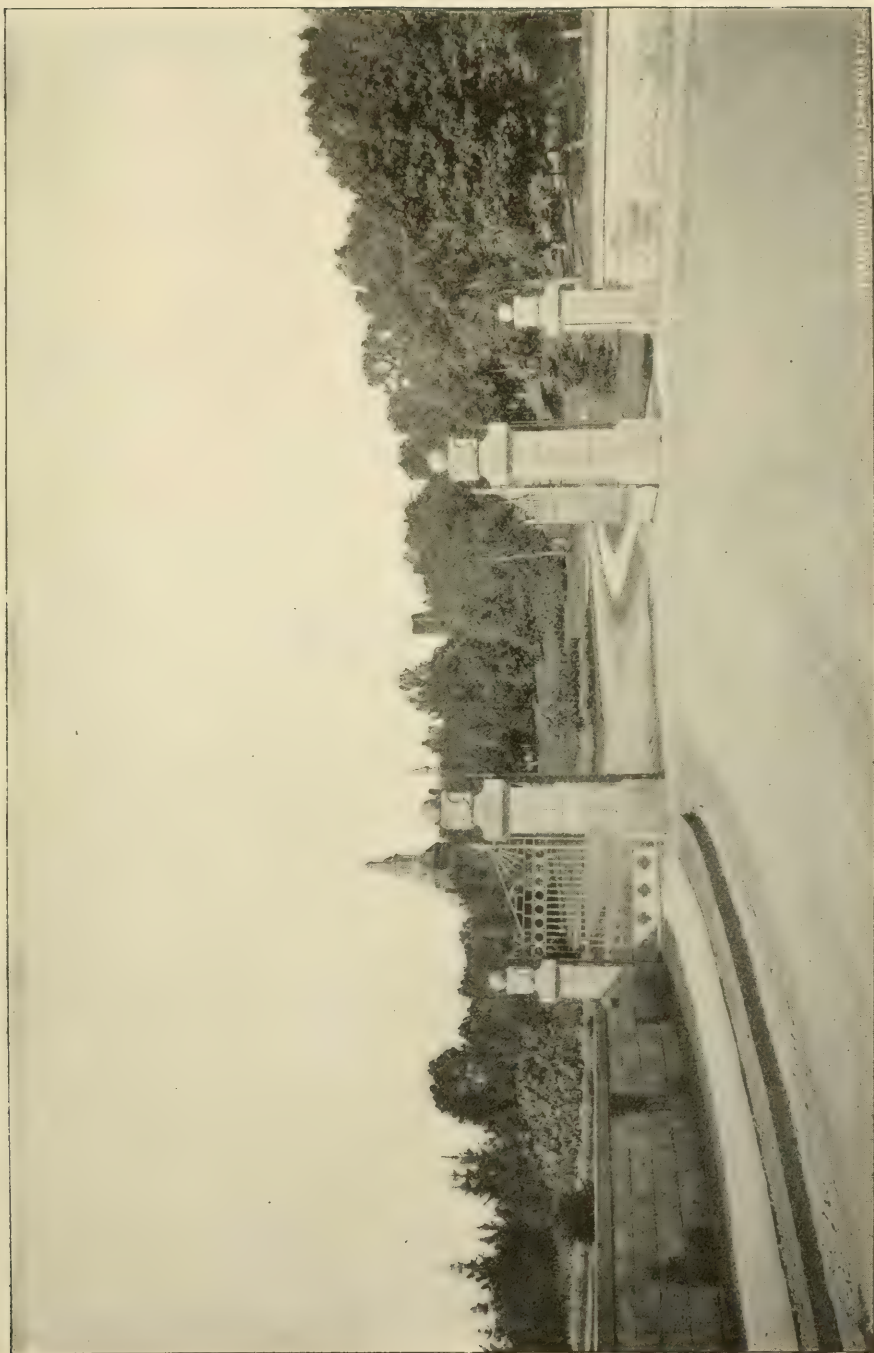
In considering these matters we are led to a few reflections concerning the means which have been employed in behalf of the patients who are placed under our care.

REST TREATMENT

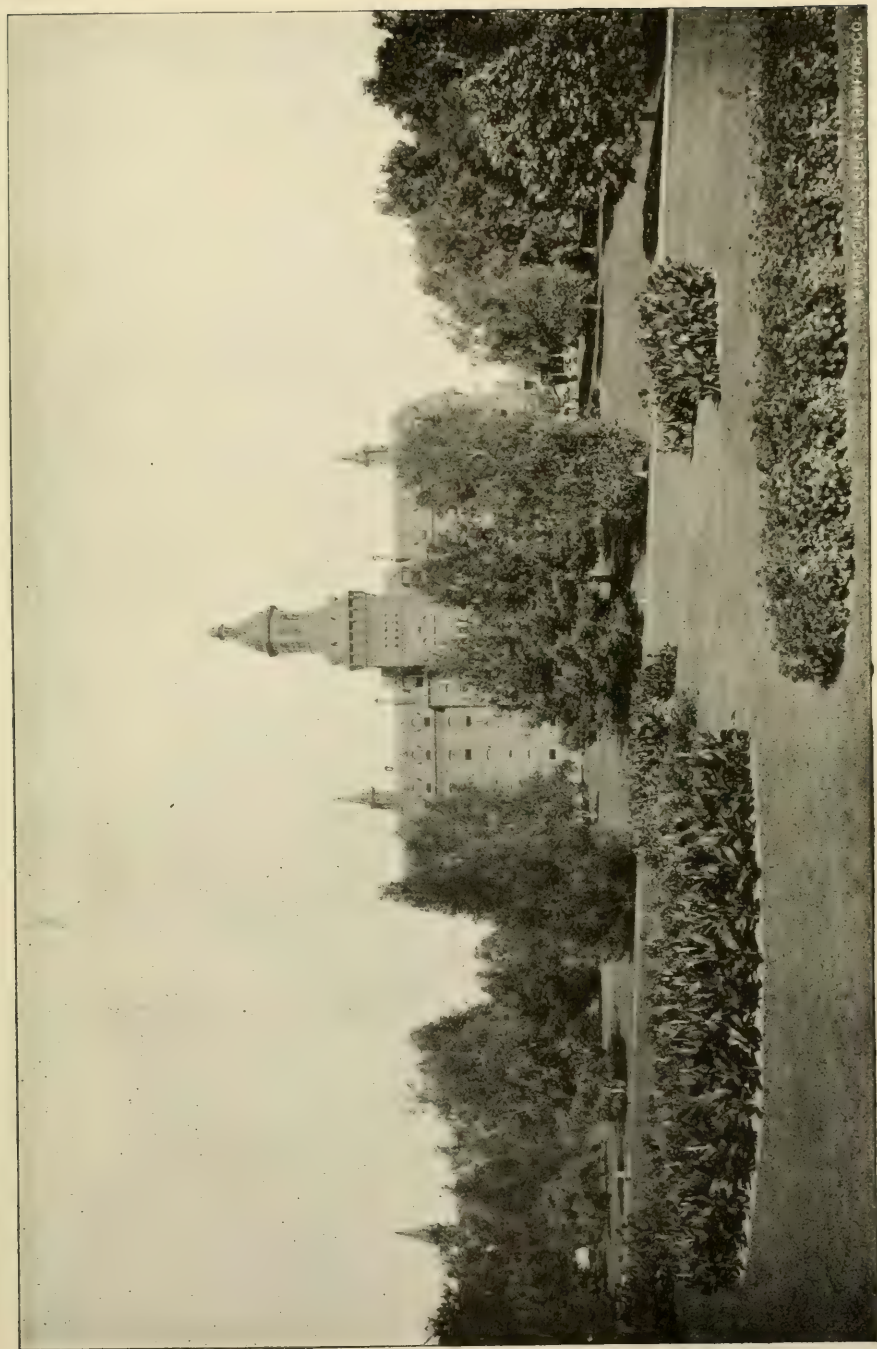
In February, 1879, we commenced the use of the rest treatment at this hospital. Referring to one of our case books we find that H. Z. was admitted January 22, 1877, suffering from

melancholia of about eighteen months' duration. He was allowed to be up and dressed during the daytime until February 21, 1879. Then we decided to give him the rest treatment, as he had made no apparent progress toward recovery. He was accordingly placed in bed and given an abundance of the best and choicest food, together with oil rubs (using cocoanut oil on account of its highly emollient properties), baths, massage and the indicated remedies. He remained in bed most of the time for about six months, when he made a substantial and satisfactory recovery. He was subsequently discharged from the hospital and returned to his home, where he continued to enjoy good health. Since then we have gradually increased the number under rest treatment until now it is given to all new patients who are suffering from mental exaltation, mental depression, or mental enfeeblement, accompanied by more or less physical exhaustion. In some instances a protection sheet is required to keep the patient in bed, but many patients after being made to rest for a few days will remain in a recumbent position voluntarily and as quietly as other sick people.

The application of rest treatment for the benefit of the insane was at first ridiculed by those who believed that exercise and plenty of it was the only proper treatment for this class, but gradually the new method has come into vogue in this and other countries. The present distinguished president of the State Commission in Lunacy of this commonwealth, in a work which he has published, says concerning the treatment of recent cases of insanity: "In acute cases, whether of mania or melancholia, it has been my experience that confinement to bed is a valuable factor in cure." And again: "Besides its [the rest cure's] indication in many cases of hysteria and neurasthenia, we find it of the greatest benefit in all sorts of nervous and mental troubles, and especially in such as evince a tendency to waste of tissue and to exhaustion." Dr. Gustave Pochon, of Paris, France, in a recent work entitled "A Study of Bed Treatment for the Violent Insane," makes this statement: "Almost always possible, always necessary, the bed treatment must constitute

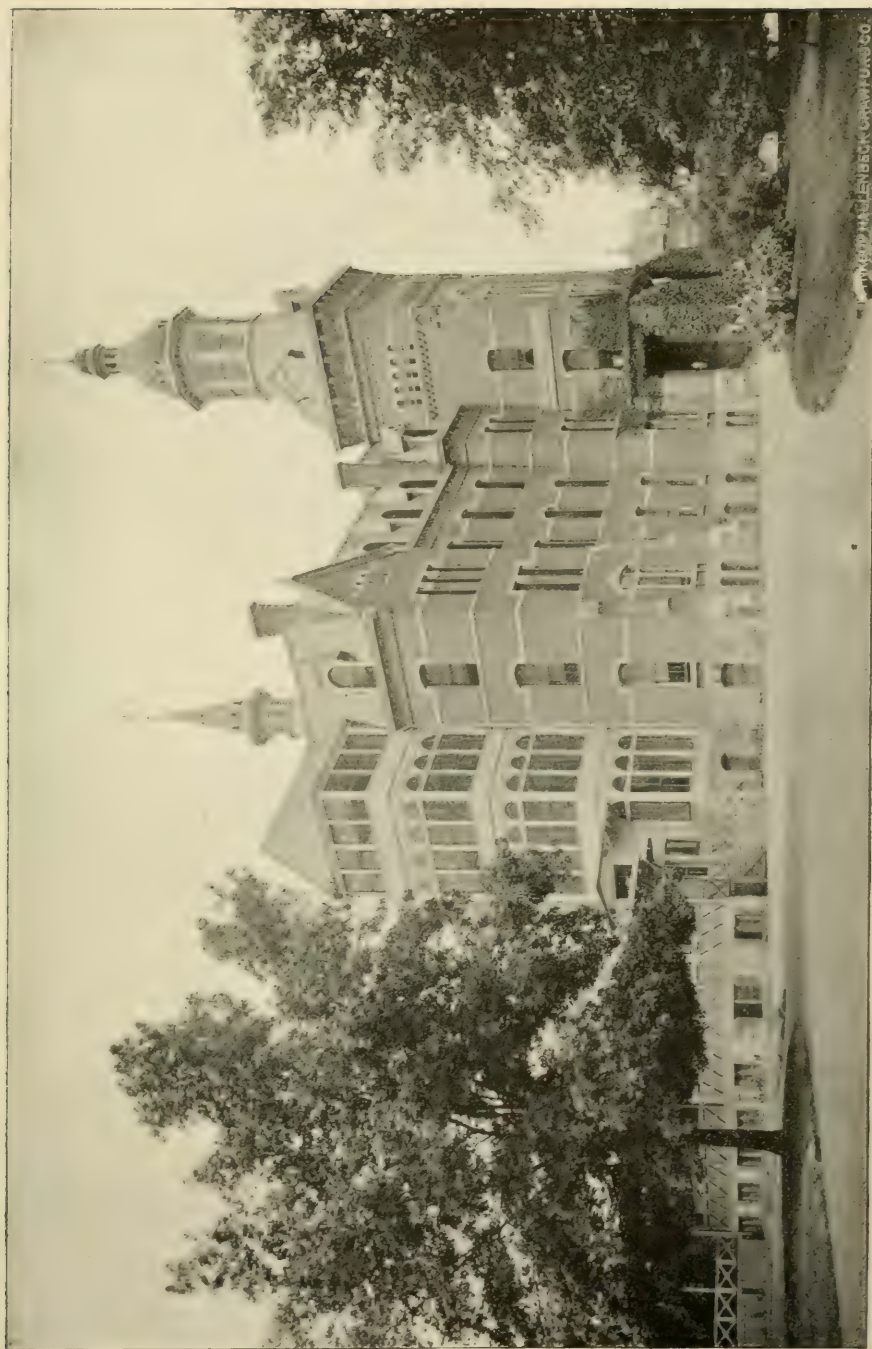


MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—MAIN ENTRANCE GATES.

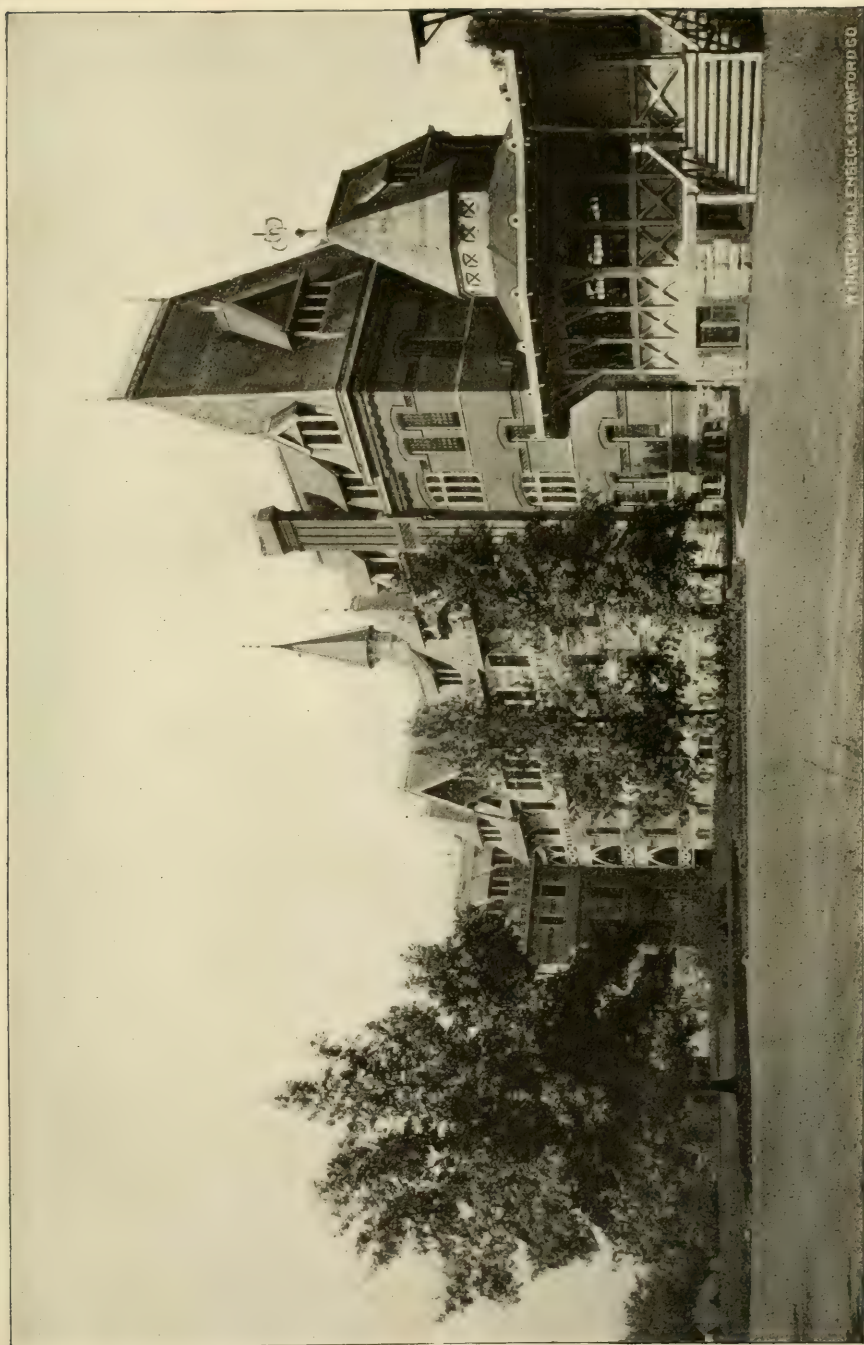


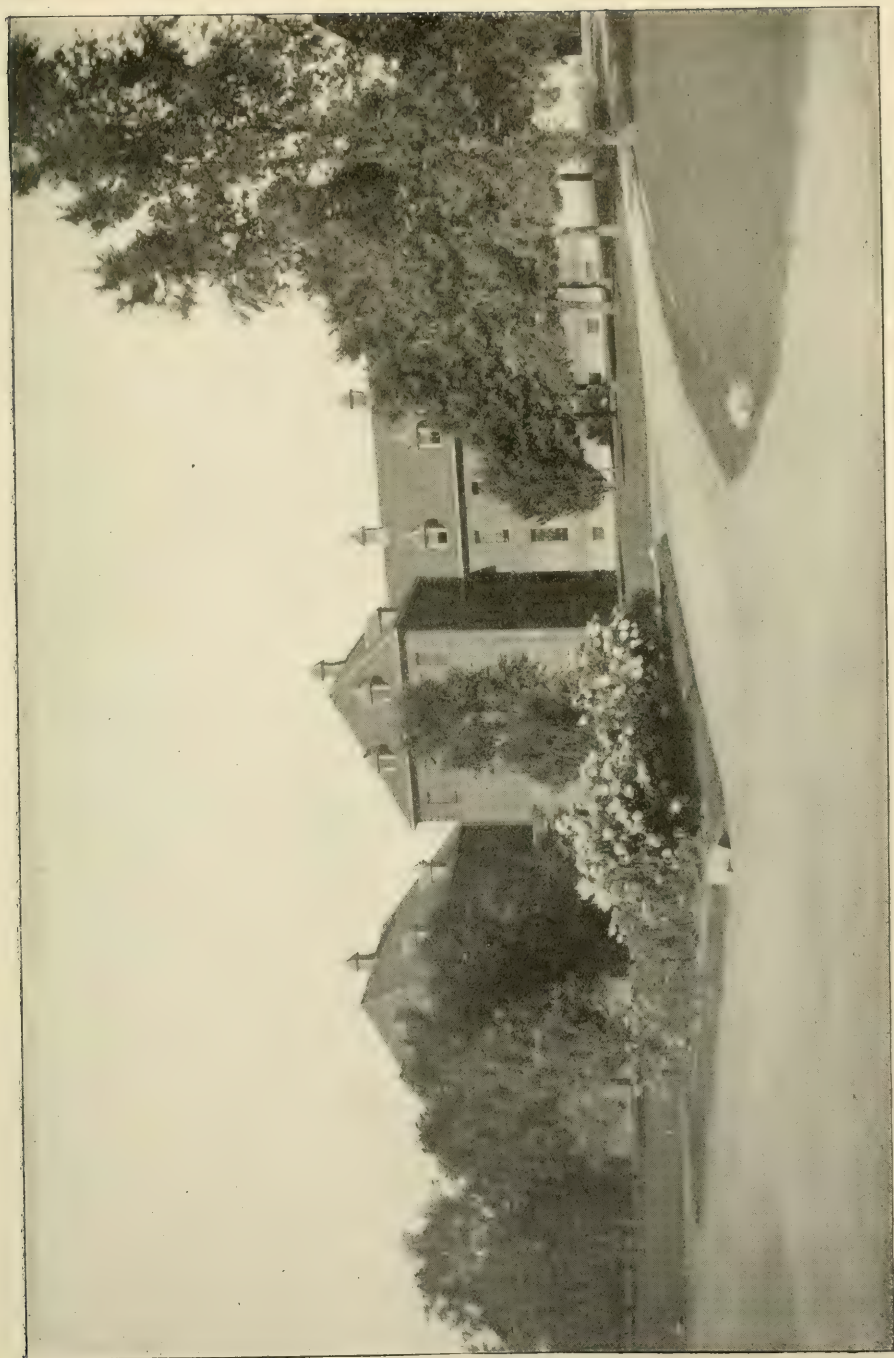
MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—MAIN BUILDING AND PARK.

WILLIAM W. BEECHER & SONS, NEW YORK.

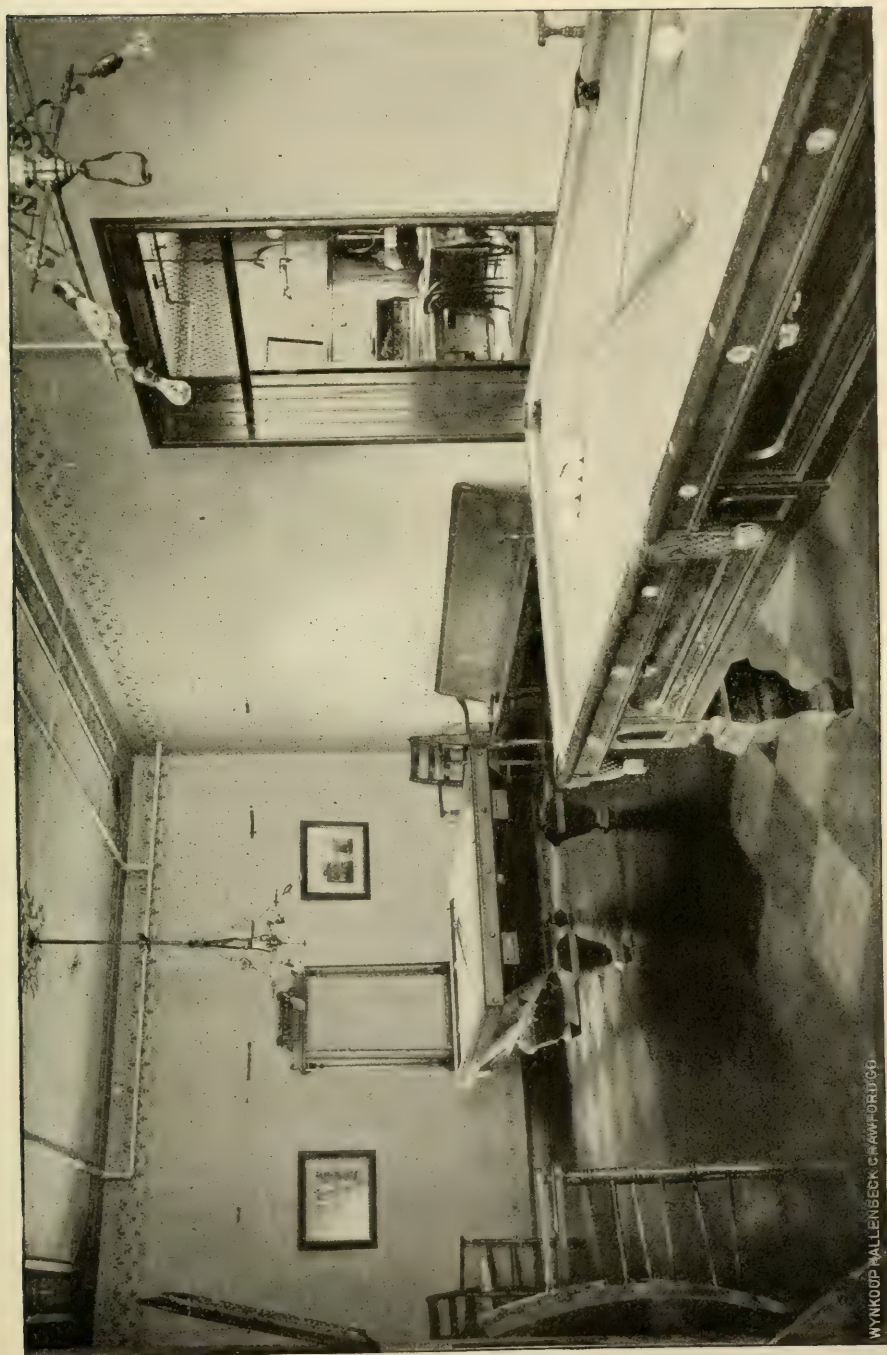


MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—SUN ROOMS AND MAIN BUILDING.





MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—ANNEXES—Nos. 1 AND 2.

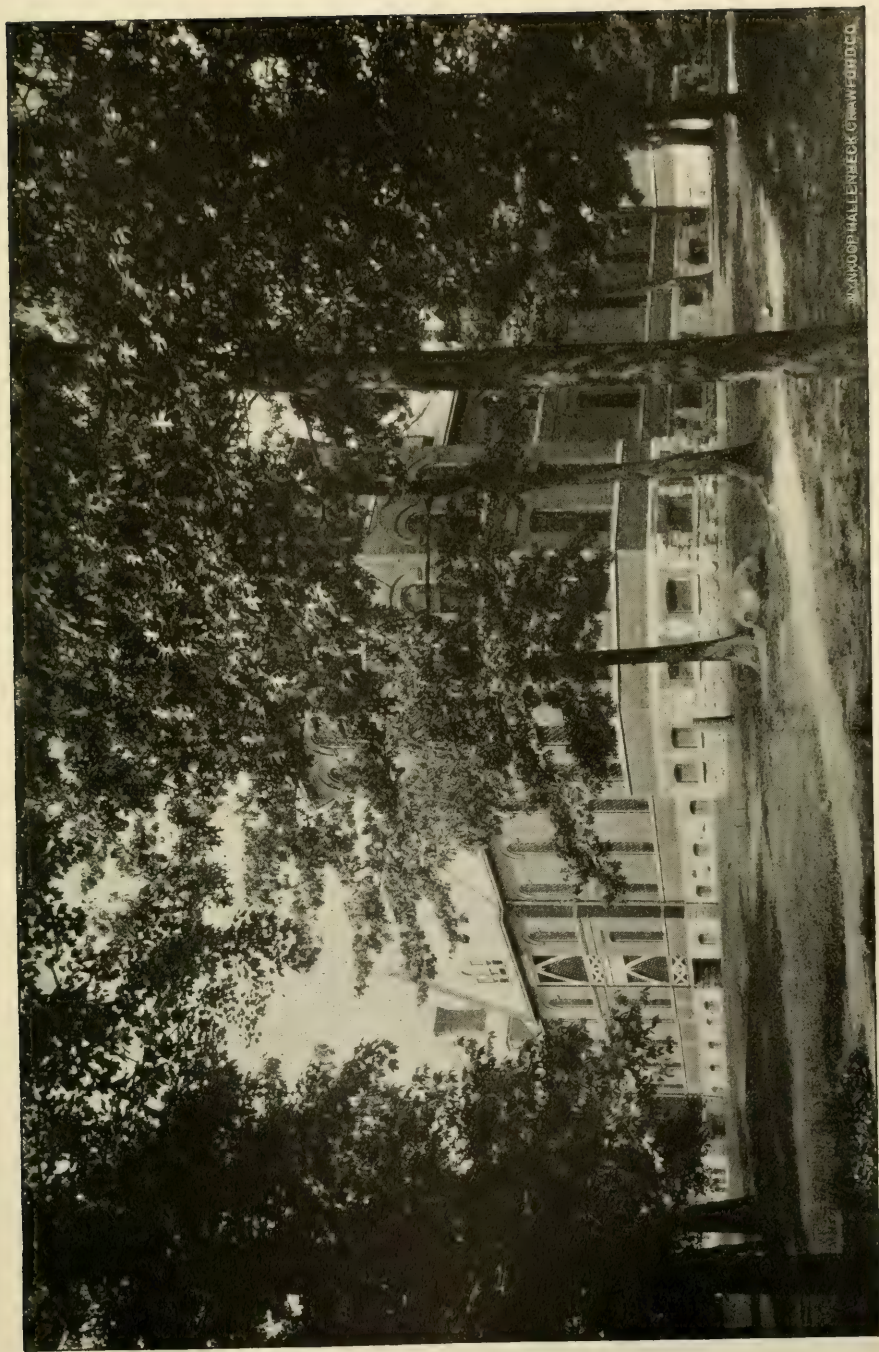


WYNKOOP MALLENECK & WOLFORD



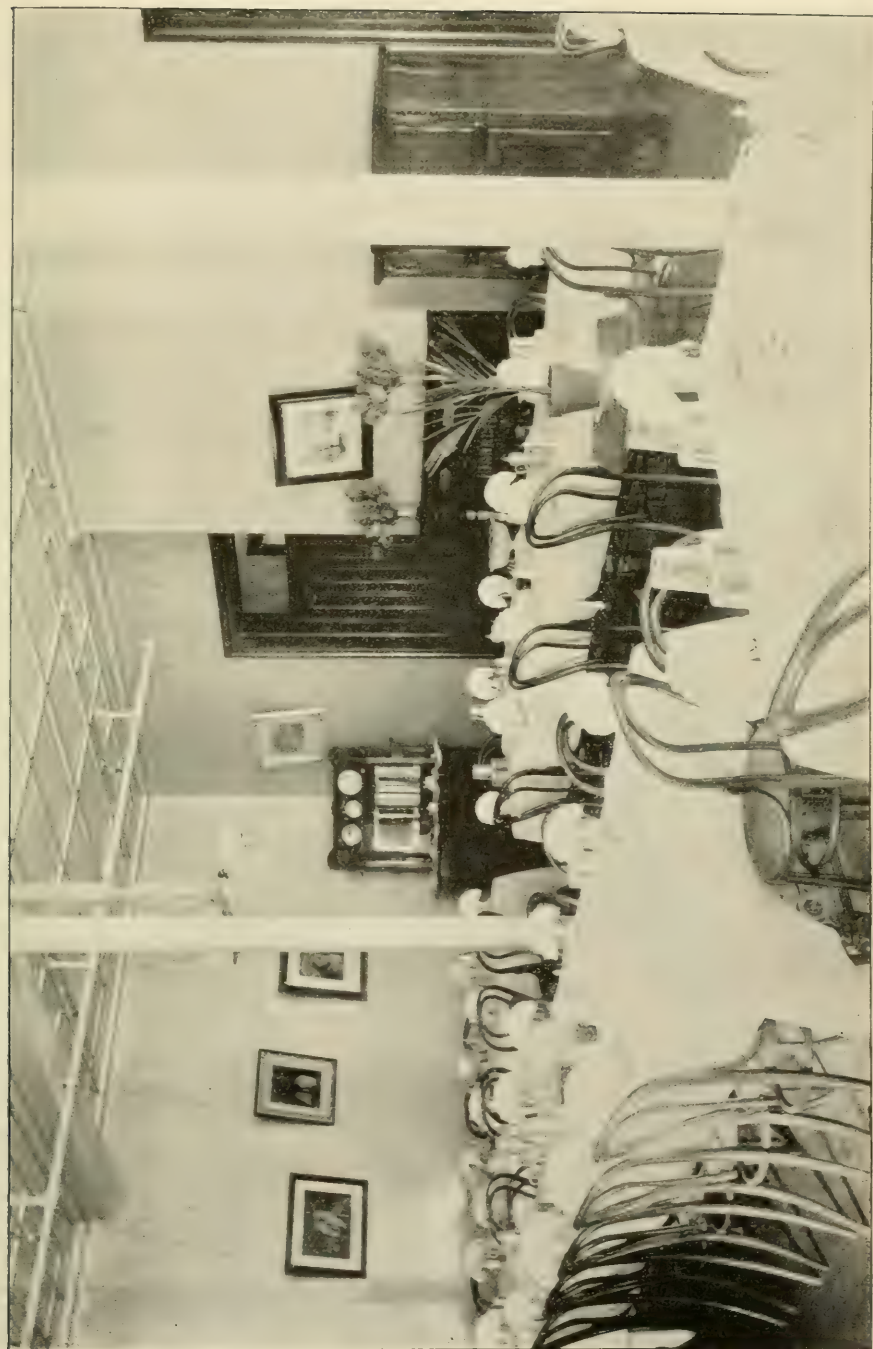
W. H. HALL & SONS, CHICAGO, ILL.

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL—DINING ROOM—ANNEX NO. 1.



W. WOODHALL & SONS, CHICAGO, ILL.

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—TALCOTT HALL.



MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—DINING ROOM—TALCOTT HALL.



MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—DAY ROOM—TALCOTT HALL.



MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—PAVILION No. 1.

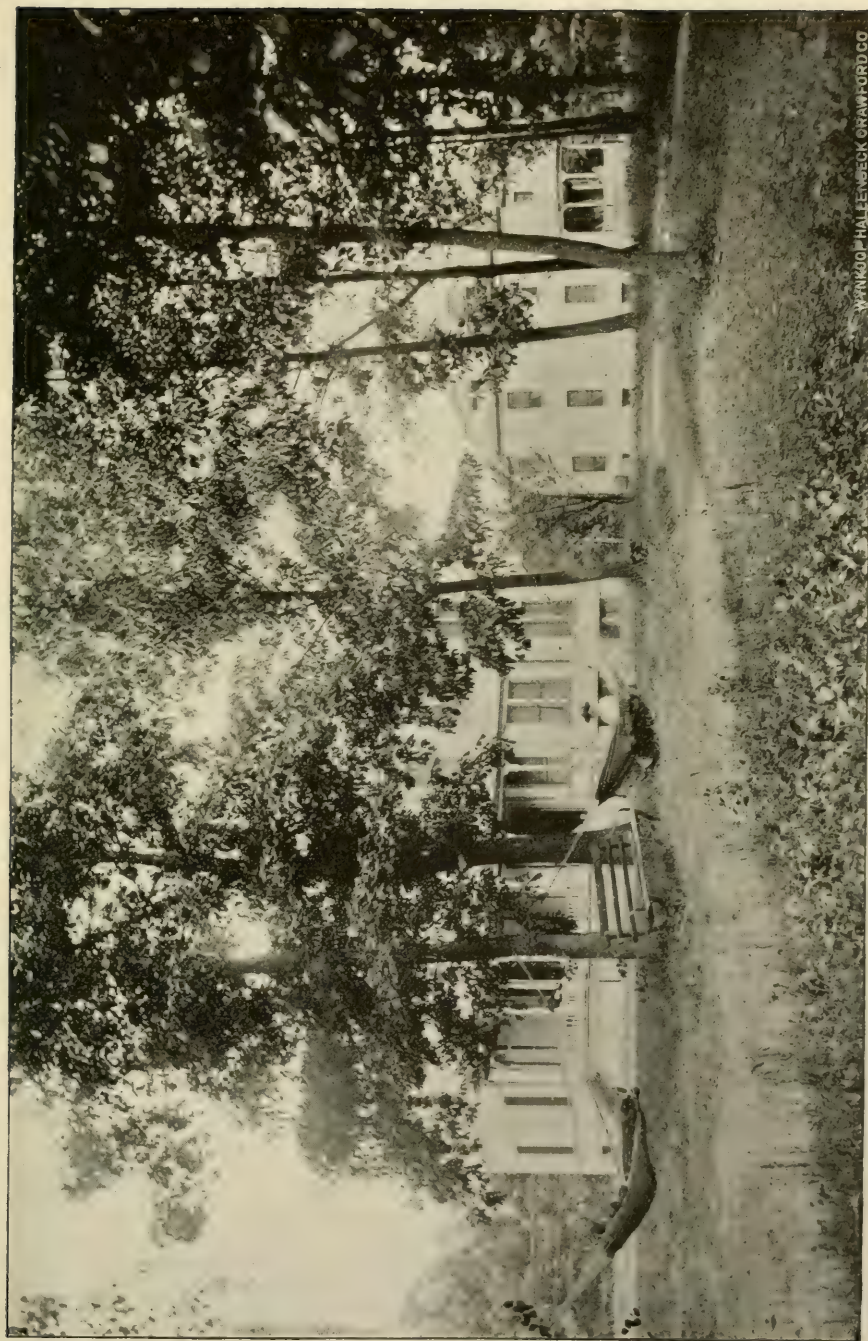
WYMKOP HATTENBECK CRAWFORD CO.



MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—SOLARIUM—MAIN BUILDING.

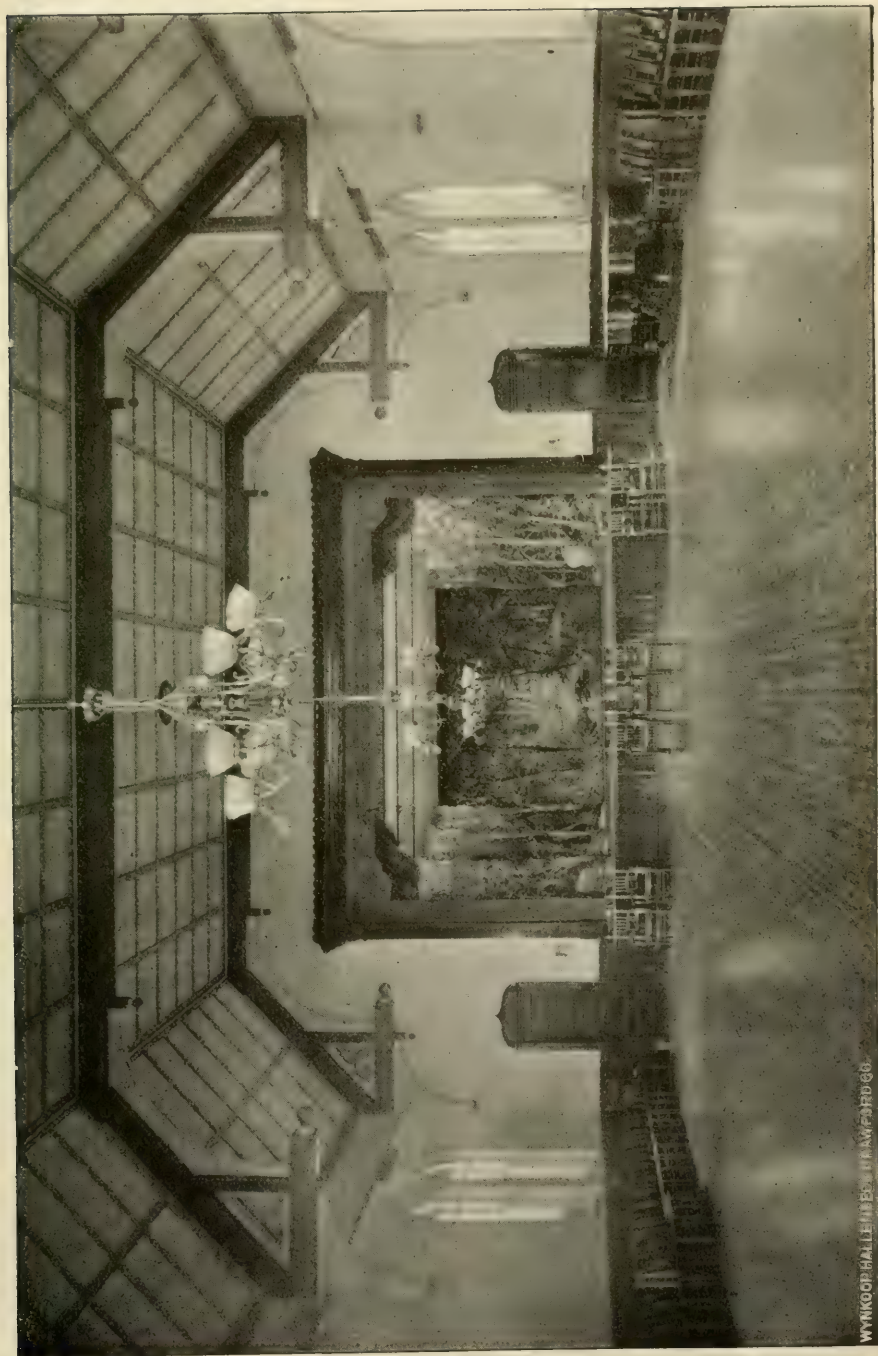


MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—PARLOR—PIERSON COTTAGE.



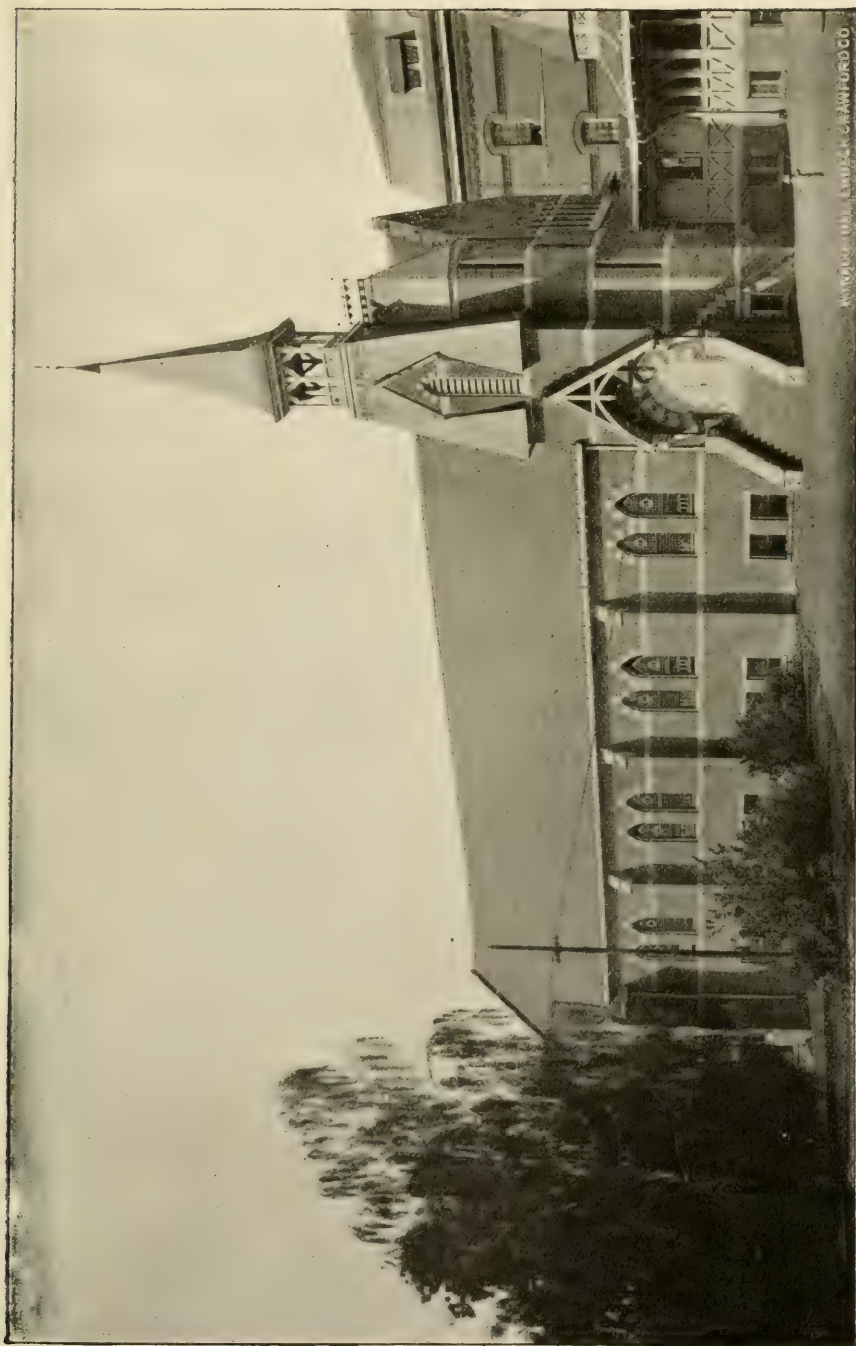
WINKUP HALENBECK CRAWFORD CO

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—GRINNELL AND PIERSON COTTAGES.



WYNGOOP HALL 115 E. 11th St. N.W. D.C. 60

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—ENTERTAINMENT HALL.



MADE BY L. H. CRAWFORD CO.

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—ENTERTAINMENT HALL.

the basis for treatment of the insane." It is a pleasure to find that at last this beneficent method of treating the insane is endorsed by some of the ablest and best alienists in this country and in Europe.

We were led to the experiment of giving rest treatment to our patients after reading "Fat and Blood" by Dr. S. Weir Mitchell, and after considering his experiences in the treatment of neurasthenia, fat anemia and other conditions of nerve exhaustion without marked mental disturbance.

Rest treatment consists in putting the patient in bed, and keeping him there until his exhausted energies have been restored or improved by the use of suitable food and nursing and medication.

The administration at the outset of an easily digested, readily assimilated hot liquid diet, followed at a proper time by solid food, is the best and most successful course to pursue. Not only is food selected according to scientific principles, but also it is prepared, cooked and served in a manner which develops the highest nutritive value, and at the same time inspires most surely the appetites of mental invalids.

Patients who are undergoing the rest treatment require the personal care of specially trained nurses. The skin, the bladder, the bowels and all other organs of the body must receive proper attention while the patients are in bed. Oil rubs, massage and baths of various kinds must be given. These patients excite the sympathy of the nurses, and inspire a feeling of tenderness which does not obtain when such cases are up and dressed, and roaming about the wards and grounds. More than that, the actual conditions of insane patients are best disclosed when they are in bed and under the observations and inspections of attending physicians and trained nurses, and thus the personal care of the patients and the application of restorative means are more effectively made than under any other circumstances.

In no class of patients are the beneficial effects of a judicious use of bed treatment more noticeable in promoting comfort and longevity than in general paresis. The restless and disturbed

paretic wears himself out less rapidly in bed and often loses his restlessness entirely, while the quieter cases in the early stages maintain a fair degree of health longer with reasonable rest and when overexertion is carefully avoided. An examination of our records shows that since this plan has been adopted the average duration of life in each case after admission has more than doubled.

We believe that the rest treatment, and a most elaborate and generous diet, and skilled nursing, and pleasant and inspiring surroundings, and modern scientific medication, should be continued; and that the scope of such treatment should be enlarged until its benefits are extended to every patient who is afflicted with that direst of all diseases—mental disorder.

SPECIAL TREATMENT

Of the 121 women patients admitted during the year, all have been examined physically by the woman assistant physician. A careful inspection of the entire body has been made in each case for the purpose of ascertaining the state of nutrition of the body, whether well nourished, poorly nourished, emaciated or obese; the condition of the heart, the lungs, the reflexes; the presence of degenerative stigmata, abnormal growths, ecchymoses, injuries, self-mutilations, or anomalies of any kind.

Of this number sixteen were found suffering from varicose conditions in the ankles or thighs. There were also nine cases of obesity. These conditions, in all cases noted, were found in women who have borne children.

Besides these general physical examinations, forty-nine gynecological examinations have been made of those patients presenting symptoms indicating any disturbance in the reproductive organs. Such patients have been subsequently treated locally when conditions called for treatment. Sitz baths, hot vaginal douches, medicated douches and topical applications have been used. Glycerine and hydrastis, an antiseptic dressing powder of boracic acid and calendula, belladonna and eucalyptus cerates have been the remedies most commonly applied

locally. These measures have been used in conjunction with internal medication called for in the individual cases.

One case of lactational insanity was admitted during the year. Most of the cases calling for gynecological treatment have been among those who have been married and have borne children.

Three patients admitted during the year have had double ovariectomy performed previous to admission. In two instances the mental aberration antedated the operation; in the other, the sexual hypochondriasis seems almost directly traceable to the operation.

Many of our patients seem to be sexual hypochondriacs. They come to us with all their thoughts centered in their pelvic organs. In some instances there seem to be no local disorders to give rise to these symptoms; in others they are apparently of insufficient gravity to account for the nervous and mental manifestations. Such patients we find are usually benefited by inattention to their reproductive systems. Many cases of erotomania manifest themselves present few, if any, local causes for this condition.

We append a list of the conditions discovered by the above-mentioned gynecological investigations:

	Cases
Atresia of vagina (partial).....	2
Anteversio	5
Cystocele	3
Caruncle (urethral)	11
Erosion	5
Eczema of genitals	2
Enlarged nymphæ	2
Fatty tumor in left hypochondriac region.....	1
Hemorrhoids	6
Infantile uterus	1
Vaginitis	2
Inguinal hernia	1
Laceration of cervix.....	7
Prolapsus uteri	3

	Cases
Prolapsus of rectum.....	1
Rectocele.....	2
Retroversion.....	8
Rudimentary nymphae.....	3
Ruptured perineum.....	8
Subinvolution.....	5
Umbilical hernia.....	2

The ophthalmological work of the hospital has been looked after during the past year by my assistant, Dr. Woodman. All cases which manifested symptoms referable to the eyes or offered promise of relief were refracted and fitted with suitable glasses and appropriate ocular hygiene instituted. In some instances this has appeared to be an important factor in bringing about recovery, and in many cases where promise of recovery could not be entertained the relief of the eye strain has added much to the comfort and well-being of the patients. Cases of presbyopia have also been supplied with glasses, enabling many who would otherwise be idle and discontented to employ themselves in reading, in sewing and in other useful ways.

The odontological work of the institution has been looked after during the year by Dr. H. C. McBair of this city, who sends a skilled assistant to the hospital one or two days of each week, and oftener when necessary. The dentist reports that he has filled 681 teeth, extracted 460 and treated 83. He has also cleaned the teeth of 110 patients. Considerable relief has thus been afforded to our sick ones, for decayed teeth are irritating to an extreme degree and produce in sensitive persons great distress of mind.

OCCUPATION

As the number of our chronic cases gradually increases, we are able to get a good many of such patients to work. About 32 per cent of our patients are now employed in the laundry, the boiler house, the tailor shop, the sewing rooms, the garden

and on the farm and grounds. It has been our aim to select such work as seems to be most agreeable to each patient, or most adapted to his individual needs. Those who are unable to endure the toil of outdoor work are encouraged to assist the attendants in the performance of their various duties on the wards. Some of the quiet chronic patients are especially useful in helping the attendants to care for the dining-rooms and in the service of food. Those who are sufficiently strong are encouraged to work out of doors, where they can not only get physical exercise, but also reap the benefit of fresh air and bright sunshine and inspiring scenery. In the performance of such tasks it is always wise and frequently beneficial to have the insane associated as much as possible with those who are sane and intelligent and warm in their sympathies for this unfortunate class.

AMUSEMENTS

The following entertainments given during the year were greatly enjoyed by our patients, and in every instance the performers were greeted by a "full house:"

Marine drill and vaudeville—Wallkill Engine Company.

Reading—Adele Weber.

Minstrels—Sun's American Company.

Sleight-of-hand performance—Professor Morrison.

Park Sisters' Quartette.

Thanksgiving reception, bal masque and vaudeville.

Japanese Wonder-Worker—Soto Sanataro.

Tree entertainment and Christmas reception.

New Year's reception and ball.

Howe's moving pictures.

Drama—"The Heart of the Rockies," Tommy Shearer Company.

Illustrated Lecture—"Arizona and New Mexico," Dr. Alois Hrdlicka.

Black's Minstrels.

Middletown Symphony Orchestra.

Company I's (Middletown, N. Y.) trip to Honolulu, illustrated.
Illustrated songs.

New York Musical Club.

Lamaur—Prestidigitator.

"Carpe Diem Club"—Middletown High School.

Colgate University Glee and Mandolin Clubs.

Choir Concert—M. E. Zion Church.

Band Concert—Twenty-fourth Separate Company Band.

Symphony Orchestra (26 pieces) assisted by chorus of ninety voices.

Reading—Agnes Mapes Taylor.

Howe's moving pictures.

Vaudeville—Nine performers.

Band Concert—Twenty-fourth Separate Company, and fireworks.

Midway Park Vaudeville Company.

Entertainment by Park Company.

Vaudeville.

Black Patti's Troubadours.

Varieties—Professor Burt, violinist; Isabel Seager, vocalist, and others.

Georgia Minstrels.

Our patients have also been favored with sleigh rides, a trolley ride and visit to the Orange county fair, ten games of baseball and two games of football.

The weekly dances have been given as usual during the season, which includes the entire year, with the exception of the months of July and August. These dances are a source of great pleasure to many of our patients.

BOOKS AND PAMPHLETS

During the year we have added to our library 355 new books and 130 pamphlets. We have also had 425 books rebound. These new additions to our library bring consolation to many troubled souls, and enable them to pass with greater ease and comfort the long, dreary hours of convalescence or of continued treatment in a hospital.

TRAINING SCHOOL

The training school for nurses at this hospital has been conducted as usual during the year 1901, and on June 12th the following nurses were graduated, having completed a two years' course: Laura L. Case, Margaret L. Donovan, Alice Schaefer, Florence L. Swayne, Gertrude Wilson, John C. Flatt, Charles G. Fuller, Robert Pratt, Emmet Stinnard, Charles P. Terwilliger, John J. Young.

The commencement exercises were held in the amusement hall of the institution on the afternoon of June 12th, the following being the program of exercises:

Overture	Mrs. Wagner
Address	Rev. Dr. Winters
Essay	Miss Alice Schaefer
Solo	H. Bergh Morrison
Class poem	Miss Gertrude Wilson
Piano solo	Mrs. Wagner
Presentation of diplomas and address.....	Dr. Talcott
Benediction	Rev. Dr. Winters

In the evening a dinner was given to the class at Pierson cottage, and it was followed by a reception and dance in the amusement hall.

Eight juniors completed the first year's course, and were admitted to membership in the senior class.

CHANGES IN THE MEDICAL STAFF

Early in the year Dr. Arthur P. Powelson presented his resignation as assistant physician, to take effect March 1, 1901. He left here for the purpose of entering a general hospital in Rochester, N. Y.

Dr. Robert C. Woodman was promoted from assistant physician to second assistant physician, taking effect August 1, 1901.

Dr. Reeve Turner was promoted from Medical interne to junior physician, taking effect February 15, 1901. Dr. Turner left the hospital on a leave of absence June 1, 1901, and returned September 6, 1901.

Dr. Thomas M. Thayer was appointed medical interne February 15, 1901.

SUGGESTIONS FOR THE COMING YEAR

In the mind of every thoughtful man the highest welfare of the patients committed to a State hospital should be the first consideration. Economy is a close second to welfare, but it should never take precedence over that which is important to the health and the comfort of those sick people who have been made the wards of a generous commonwealth. The hand of distribution should be guided not only by a spirit of honesty and fairness, but likewise by a spirit of philanthropic and broad-minded appreciation of the needs of the sick. It would be better to spend a thousand dollars in one year in order to accomplish the cure of one insane man than to spend a hundred dollars on that same person each year for ten years and then have nothing on hand but a chronic wreck to show for the expenditure.

In the report of the board of managers is presented a list of very desirable improvements. We will give a brief explanation of each item:

Solariums.—The solariums attached to the main building have proved to be very beneficial to the patients in that building, therefore we ask for solariums for pavilions Nos. 1 and 2, annexes Nos. 1 and 2 and Talcott hall. Then all our patients will be more highly favored than now with an abundance of fresh air and sunshine on the wards, and these are imperative necessities in the care and cure of the sick.

Rewiring for electric lights.—An allotment has been made for rewiring the main building for electric light. After a careful examination, we have come to the conclusion that a general rewiring should be made in pavilions Nos. 1 and 2, annexes Nos. 1 and 2, and Talcott hall. The old wiring has been in use a long time, and it is now unsafe and unsatisfactory.

Hospital wards for women.—We need more hospital wards for the care of women patients. We think that a suitable building, to accommodate about sixty patients, could be erected between Grinnell and Pierson cottages at a cost of about \$12,000, or \$200 per capita. This is a very reasonable sum for the shelter and hospital care of cases of acute insanity. As soon as a

patient in this proposed hospital structure is sufficiently convalescent, she may then be permitted to occupy one of the cheerful rooms in the cottages.

Overhauling water sections in pavilions Nos. 1 and 2.—The present water-closets in pavilions Nos. 1 and 2 have been long in use, and they are not in as good sanitary condition as they should be. These closets have been repaired until it seems impossible to place them in good order any longer. This improvement has been urged by our chief engineer for several years.

Stand pipe for water supply.—The large tank which supplies the hospital with water is located in the tower of the main building. It has been in use for more than a quarter of a century. It is getting old, and the timbers which support it are in an uncertain condition. If the supports should give way, a great amount of damage might be done to the main building and its inmates. It would be safer and better in every respect to have a new stand pipe located near the boiler house, from which water for the entire institution may be safely distributed.

Warren-Webster system for cottages and nurses' homes.—The Warren-Webster system of steam heating has been so successful and so economical in the large buildings that it seems advisable to extend it to Grinnell and Pierson cottages and to the nurses' homes. This would dispense with the small boilers now in use in these buildings and save considerable labor.

Mechanical stokers.—The necessity for mechanical stokers has been stated in a former report. They are economical and uniform in their working, and are therefore recommended.

Carpets, curtains, etc.—It may seem trite, but nevertheless it is true, that carpets and curtains and furniture and kitchen utensils which are in constant use will wear out or get broken, and hence the supply should be renewed from time to time. We desire to keep the institution furnished at a reasonable expense with that which is comfortable for the patients. Therefore we ask for an allotment for this purpose.

Greenhouses.—More than twenty-two years ago the State appropriated about twelve hundred dollars for a greenhouse.

Since then three other greenhouses have been erected and paid for without special appropriation from the State, but with funds received from private patients. The wooden frameworks of these greenhouses are now considerably decayed by reason of the fact that they are exposed to undue heat and moisture from within and to the action of sun and rain and frost from without. We think that the two small greenhouses may be repaired and continued in use for another year or two, but the two large structures should be entirely renewed, so far as the wooden framework in each is concerned. The present greenhouses are located within the reservoir plaza. On account of their proximity to the high buildings, they cannot now receive enough sunshine for the proper cultivation of plants. Hence I would suggest that if two new greenhouses are allowed, they should be erected in an open field west of the boiler house, where the plants can receive the full benefit of the sun's rays.

A new 150 horse-power boiler.—Our engineer thinks that a new boiler should be added to the present steam heating and power plant. Some of our boilers have been constantly in use for over twelve years. Mr. R. S. Hale, of Boston, who inspected our boiler plant, suggested that with another boiler we might be able to burn a smaller variety of coal, and it is thought that this could be secured at a somewhat lower price. We would like therefore to make arrangements to secure another boiler.

New roofs for dynamo room and laundry.—The old roofs of the dynamo room and the laundry building are covered with tin, and are becoming much worn and leaky. Instead of repairing the roofs as they now stand, the walls should be raised to correspond with the walls of the boiler house and new roofs should be put on. This would greatly improve the condition of the dynamo room, and would also facilitate the proper ventilation of the laundry. The expense will not be great, and the improvement is very desirable.

Dining-room.—A dining-room could be fitted up at moderate expense in the basement of annex No. 1. This would answer for the patients and the employees of that building. Then we

could utilize the present dining-room on ward 25 as a room for hospital patients. This room would accommodate about thirty-eight patients. By making the proposed change we could increase, at a very moderate cost, our hospital facilities on the men's side.

Painting buildings.—We need an allotment to continue the work of painting the buildings. Some of the large buildings, notably the main building and the pavilions, are much in need of painting.

Electric fans.—During the hot weather the wards that are crowded with sick patients should have frequent changes of air. To effect this most successfully we think a series of electric fans should be installed.

Fire extinguishers.—Grinnell fire extinguishers should be placed in the new cold-storage building in order to properly protect that building against fire.

OFFICIAL VISITS

During the past year the hospital has been honored by a visit from the Governor of this State. He made a careful inspection of the institution, and we anticipate that the suggestions in his forthcoming message to the Legislature will tend to conserve the best interests of our public institutions and of the people.

We have also received three visits from members of the Commission in Lunacy. On such occasions the necessities of the patients were fully considered, and plans for the further improvement of the institution were examined and discussed.

The managers have held their customary quarterly meetings at the hospital, and monthly inspections of the wards have been made by members of the visiting committee.

ACKNOWLEDGMENTS

Once more we wish to extend our thanks to the editors and proprietors of the Middletown Times, the Middletown Press and the Middletown Argus; the Independent Republican of Goshen, the Warwick Advertiser, the Tri-State Union and Gazette of Port Jervis, the Catholic World Magazine, the

Goshen Democrat, the Babylon Signal, the Walden Citizen, the Waterville Times, the Walton Chronicle Times, the Canandaigua Messenger, the Canandaigua Chronicle, the Bath Advocate, the Ovid Gazette and Independent, the Dispatch of Warwick, and the Morningside Mirror of Edinburgh, Scotland, for bestowing upon our patients during the past year their respective publications.

We desire to thank the members of the Commission in Lunacy for their courteous treatment and valuable advice, and for every assistance which they have rendered in behalf of this hospital.

To the members of the board of managers I wish to present my heartfelt thanks for the confidence which they have so long and so kindly manifested in our work and in that of all the workers of this household.

I desire to thank the members of the medical staff for their earnest and enthusiastic work in behalf of the sick. I am under especial obligations to Dr. Ashley, my first assistant, for his careful, able and conscientious supervision of the affairs of the institution during my necessary absences.

To the steward and the heads of the various departments, and also to the supervisors, the nurses and attendants, and to every faithful employee of the hospital, I present my grateful acknowledgments.

We wish to renew our expressions of gratitude to the clergymen of Middletown for consolation to our sick ones during the past twelve months. They have held services regularly at the hospital, and have visited the sick whenever requested to do so. We also remember with gratitude the choirs of the various churches for favoring our patients with inspiring music on all the Sundays of the year.

And to Him who guides us in all our work we render profound thanks for the blessings of the past year, and humbly implore guidance and strength for the performance of every duty in the untried future.

Very respectfully submitted

SELDEN HAINES TALCOTT

Medical Superintendent

EXPLANATORY NOTES AS INDEX TO TABLES

1. Showing movements of population for the year ending September 30, 1901.
2. General statement October 1, 1901.
3. Showing the assigned causes of insanity in cases admitted during the current year.
4. Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888.
5. Showing results of treatment in presumably curable cases for the current year.
6. Showing the duration of insanity previous to admission and the period under treatment of patients discharged recovered during the current year and since October 1, 1888.
7. Showing the causes of death of patients who died during the current year and since October 1, 1888.
8. Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888.
9. Showing civil condition of patients admitted during the current year and since October 1, 1888.
10. Showing degree of education of patients admitted during the current year and since October 1, 1888.
11. Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888.
12. Showing ages of those admitted during the current year and since October 1, 1888.
13. Showing ages of those discharged recovered during the current year and since October 1, 1888.
14. Showing ages of patients who died during the current year and since October 1, 1888.
15. Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1901.

16. Showing period of residence in hospital of patients remaining under treatment September 30, 1901.

17. Showing the occupation of those admitted during the current year and since October 1, 1888.

18. Showing the nativity of patients admitted during the current year and since October 1, 1888.

19. Showing the residence by counties and classification of patients admitted during the year ending September 30, 1901.

20. Showing the residence by counties and classification of patients remaining under treatment September 30, 1901.

21. Showing number of patients transferred from other institutions for the insane, number of chronic cases admitted, number of acute cases admitted and percentage of recoveries on acute cases admitted during the past ten years.

22. General statement of operations of the Middletown State Homeopathic Hospital from May 1, 1874, to September 30, 1901.

23. Showing percentage of recoveries, also percentage of deaths on the whole number of patients admitted, average daily population, whole number treated and whole number discharged since the opening of the institution.

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1901.....	588	622	1,210
Admitted during year ending September 30, 1901:			
On original commitments:			
From residences.....	86	115	201
By transfers from county houses.....	1	2	3
By transfers from other institutions for insane	7	4	11
Total number under treatment during year.	682	743	1,425
Daily average population.....	598	645	1,243
Capacity of institution.....	566	534	1,100
Discharged during the year:			
As recovered.....	33	56	89
As improved.....	18	9	27
As unimproved.....	2	1	3
As not insane.....	1	.....	1
Died.....	36	32	68
Whole number discharged during the year.....	90	98	188
Remaining October 1, 1901.....	592	645	1,237

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	April, 1874
Total acreage of grounds and buildings...	281
Value of real estate, including buildings.....	\$1,137,646 00
Value of personal property	85,000 00
Acreage under cultivation.....	210

Receipts during year, maintenance fund:

Balance on hand October 1, 1900.....	\$135 36
From State Treasury for maintenance on estimates 1 to 12, inclusive	217,002 55
From private patients.....	40,927 15
From reimbursing patients.....	13,396 37
From all other sources.....	4,172 96

Total receipts for maintenance.....	\$275,634 39
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Total receipts from State Commission in Lunacy for extraordinary improvements.....	\$39,752 06
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Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries.	\$17,311 68
Estimate No. 2. For wages.....	78,342 49
Estimate No. 3. For provisions and stores.....	78,677 19
Estimate No. 4. For ordinary repairs.....	4,366 24
Estimate No. 5. For farm and grounds.....	5,035 06
Estimate No. 6. For clothing	5,631 49
Estimate No. 7. For furniture and bedding....	4,687 58
Estimate No. 8. For books and stationery.....	1,126 94
Estimate No. 9. For fuel and light.....	15,004 72
Estimate No. 10. For medical supplies.....	1,099 69
Estimate No. 11. For miscellaneous expenses....	6,512 03
Estimate No. 12. For transportation.....	1,585 59

Total disbursements, estimates 1 to 12, inclu- sive	\$219,380 70
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Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	\$39,752 06
Remitted to State Treasurer, sundry receipts, Chapter 580, Laws of 1899.....	\$54,670 67
Balance October 1, 1901:	
General maintenance fund.	\$1,583 02
Weekly per capita cost on daily average number of patients, estimates 1 to 12, inclusive.....	\$3 394
Maximum rate of wages paid attendants:	
Men.....	\$34 00
Women	29 00
Minimum rate of wages paid attendants:	
Men	\$20 00
Women	14 00
Proportion of day attendants to average daily population.....	1 to 10.3
Proportion of night attendants to average daily population.	1 to 46
Percentage of daily patient population engaged in some kind of useful occupation.....	32
Estimated value of farm and garden products during year	\$13,000 00
Estimated value of articles made or manufactured by patients during year.....	4,500 00

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.).....	9	19	28	3	3	6	....
Mental strain, worry and overwork (not included in above) ..	11	29	40	4	7	11	....
Religious excitement ..	1	2	3	1	2	3	....
Love affairs (including seduction)		4	4				....
Fright and nervous shock.....	1	1	2				....
Physical:							
Intemperance.....	16	2	18	4		4	3
Veneral diseases	4		4	1		1	....
Masturbation.....	9	1	10	3		3	....
Sunstroke.....	2		2				....
Accident or injury	3	3	6	1		1	....
Pregnancy		1	1		1	1	....
Parturition and puerperium		1	1				....
Change of life		5	5		1	1	....
Fevers.....	1		1				....
Privation and overwork.....		4	4		2	2	....
Epilepsy	2	5	7		2	2	....
Diseases of skull and brain	3		3	1		1	....
Old age.....	4	6	10				2
Epidemic influenza....	5		5	2		2	....
Abuse of drugs	2	3	5				....
All other bodily disorders and ill health.	6	7	13		1	1	....
Heredity	1	14	15	1	14	15	....
Unascertained	13	14	27		2	2	11
Not insane	1		1				
Total.....	94	121	215	21	35	56	16

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious				11		12
Mania, acute	36	31		796	531	47
Mania, recurrent	4	3		43	31	
Mania, chronic	7	1	9	202	15	46
Melancholia, acute	85	44	1	1,136	612	78
Melancholia, simple		1		4	5	
Melancholia, chronic	3	6	3	109	21	65
Alternating (circular) in- sanity	2			18	2	
Paranoia	17		2	192	21	16
General paralysis	10		12	172		148
Dementia, primary			1	14	7	1
Dementia, terminal	31		39	627		392
Epilepsy with insanity	9		1	72	1	17
Imbecility with maniacal attacks	10	3		82	6	5
Idiocy				2		1
Not insane*	1			15		4

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month.....	9	22	31	.....	.....	.....	155	196	351	7	2	9
One to three months.....	12	8	20	4	11	15	141	165	307	68	75	143
Three to six months.....	4	9	13	12	12	24	84	99	183	156	184	340
Six to nine months.....	2	8	10	5	9	14	56	73	129	109	143	252
Nine months to one year.....	.....	3	3	2	7	9	8	20	28	76	75	151
One year to eighteen months..	2	1	3	6	4	10	37	43	80	66	83	149
Eighteen months to two years..	.....	.....	.....	.....	2	2	5	6	11	34	37	71
Two to three years.....	1	1	2	3	4	7	19	22	41	23	39	62
Three to four years.....	2	1	3	1	1	2	15	12	27	12	19	31
Four to five years.....	.....	.....	.....	.....	1	1	3	3	6	8	8	16
Five to ten years.....	.....	1	1	.....	1	1	12	20	32	6	17	23
Ten to twenty years.....	.....	1	1	.....	4	4	3	5	8	1	7	8
Not insane*.....	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Unascertained.....	1	1	2	.....	.....	.....	28	24	52	.....	.....	.....
Total.....	34	56	90	34	56	90	566	689	1,255	566	689	1,255

* Includes cases of alcoholism, opium habit, etc.

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases:						
Erysipelas.....	3	1	4	3	1	4
Septicemia and pyemia.....					1	1
Dysentery.....		1	1		3	3
Tuberculosis.....				1		1
Anthrax.....				2		2
Constitutional diseases:						
Arthritis deformans.....					1	1
Diabetes mellitus and diabetes insipidus.....				1	2	3
Diseases of the digestive system:						
Diseases of the stomach.....				1	5	6
Diseases of the intestines.....	3	3	6	7	23	30
Diseases of the liver.....				1	1	2
Diseases of the respiratory system:						
Diseases of the nose and larynx.....					2	2
Diseases of the bronchi.....	4	1	5	10	3	13
Diseases of the lungs.....	1	5	6	21	35	56
Diseases of the pleura.....				1		1
Diseases of the circulatory system:						
Diseases of the heart.....	1		1	16	18	34
Diseases of the blood and ductless glands:						
Anemia, pernicious anemia and leukemia.....	1		1	1		1
Diseases of the genito-urinary system.....	2	1	3	16	8	24
Diseases of the nervous system:						
Diseases of the nerves.....					1	1
Diseases of the spinal cord.....				3		3
Diseases of the meninges.....				1	2	3
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions).....	2	5	7	63	49	112
Epilepsy.....	1		1	1		1
Mental diseases:						
Exhaustion of acute mental disease.....				39	35	74
Exhaustion of chronic mental disease.....	10	10	20	186	113	299
General paralysis of the insane..	7	3	10	103	18	121

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
The intoxications; heat-stroke; obesity:						
Alcoholism.....				4	1	5
Accident.....				2	.....	2
Suicide.....		1	1	4	2	6
Surgical and gynecological diseases and diseases of the skin....		1	1	....	2	2
Malignant new growths or cancer..	1	.....	1	7	12	19
Total.....	36	32	68	494	338	832

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	5	10	15	145	159	304
Maternal branch.....	4	13	17	180	209	389
Paternal and maternal branches	2	3	5	23	23	46
Collateral branches.....	10	9	19	117	167	284
No hereditary tendencies.	67	76	143	1,164	1,071	2,235
Unascertained	6	10	16	110	127	237
Total	94	121	215	1,739	1,756	3,495

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	45	54	99	843	687	1,530
Married	43	48	91	741	816	1,557
Widowed	5	19	24	137	242	379
Divorced	1	.....	1	9	7	16
Unascertained .....	.....	.....	.....	9	4	13
Total	94	121	215	1,739	1,756	3,495

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	10	1	11	92	27	119
Academic	6	13	19	155	231	386
Common school	68	97	165	1,260	1,288	2,548
Read and write	3	1	4	29	27	56
Read only	3	3	6	40	35	75
No education	3	5	8	83	75	158
Unascertained	1	1	2	80	73	153
Total	94	121	215	1,739	1,756	3,495

TABLE No. 11
Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901					SINCE OCTOBER 1, 1888				
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT	
	Men	Women	Total	Men	Women	Total	Men	Women	Total	
Under one month.....	4	3	7	1	2	3	55	51	106	120
One to three months.....	3	5	8	3	.....	3	46	50	96	72
Three to six months.....	7	3	10	2	.....	4	54	25	79	56
Six to nine months.....	2	3	5	4	2	6	47	21	68	44
Nine months to one year.....	1	3	4	2	2	4	14	16	30	35
One year to eighteen months.	7	4	11	.....	4	4	52	32	84	62
Eighteen months to two years.	2	.....	2	2	1	3	16	14	30	79
Two to three years.....	3	.....	3	3	1	4	51	26	77	86
Three to four years.....	1	1	2	1	3	4	26	25	51	55
Four to six years.....	1	4	5	3	2	5	27	16	43	82
Six to ten years.....	1	1	2	4	11	15	30	18	48	99
Ten to twenty years.....	2	3	5	11	2	13	34	10	44	40
Twenty years and over.....	.....	1	1	.....	.....	.....	10	15	25	2
Not insane*.....	.....	.....	.....	.....	.....	.....	3	1	4	.....
Unascertained.....	2	1	3	.....	.....	.....	29	18	47	.....
Total.....	36	32	68	36	32	68	494	338	832	832
Average duration of insane life (giving years and tenths).....				8.4	8.1	8.24	.....	.....	.....	6.0

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years.....					2	2
From 10 to 15 years.....		1	1	8	7	15
From 15 to 20 years.....	3	3	6	70	54	124
From 20 to 25 years.....	10	6	16	168	135	303
From 25 to 30 years.....	10	19	29	201	212	413
From 30 to 35 years.....	7	9	16	203	230	433
From 35 to 40 years.....	8	8	16	230	199	429
From 40 to 50 years.....	20	34	54	343	418	761
From 50 to 60 years.....	19	27	46	227	262	489
From 60 to 70 years.....	12	7	19	179	139	318
From 70 to 80 years.....	5	6	11	84	78	162
From 80 to 90 years.....		1	1	24	17	41
Unascertained.....				2	3	5
Total	94	121	215	1,739	1,756	3,495

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years.....	1	1	2	35	42	77
From 20 to 30 years.....	10	14	24	131	169	300
From 30 to 40 years.....	4	13	17	139	176	315
From 40 to 50 years.....	10	12	22	130	159	289
From 50 to 60 years.....	5	14	19	72	95	167
From 60 to 70 years.....	2	1	3	40	41	81
From 70 to 80 years.....	1	1	2	18	7	25
From 80 to 90 years.....				1		1
Total	33	56	89	566	689	1,255

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....					2	2
From 15 to 20 years.....				3	2	5
From 20 to 25 years.....				11	6	17
From 25 to 30 years.....	2		2	23	12	35
From 30 to 35 years.....	2	1	3	37	18	55
From 35 to 40 years.....	4	3	7	53	24	77
From 40 to 50 years.....	7	7	14	97	72	169
From 50 to 60 years.....	8	7	15	95	63	158
From 60 to 70 years.....	8	3	11	85	60	145
From 70 to 80 years.....	4	7	11	64	60	124
From 80 to 90 years.....	1	4	5	25	18	43
From 90 to 100 years.....				1	1	2
Total	36	32	68	494	338	832

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month.....	15	17	32
One to three months	17	23	40
Three to six months	11	18	29
Six to nine months	4	10	14
Nine months to one year.....	2	2	4
One year to eighteen months.....	13	9	22
Eighteen months to two years.....	1	2	3
Two to three years.....	6	5	11
Three to four years	6	7	13
Four to five years.....	.....	2	2
Five to ten years	6	6	12
Ten to fifteen years	2	7	9
Fifteen to twenty years.....	.....	1	1
Twenty to thirty years	1	1	2
Not insane*.....	1	.....	1
Unascertained.....	9	11	20
Total	94	121	215

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 16

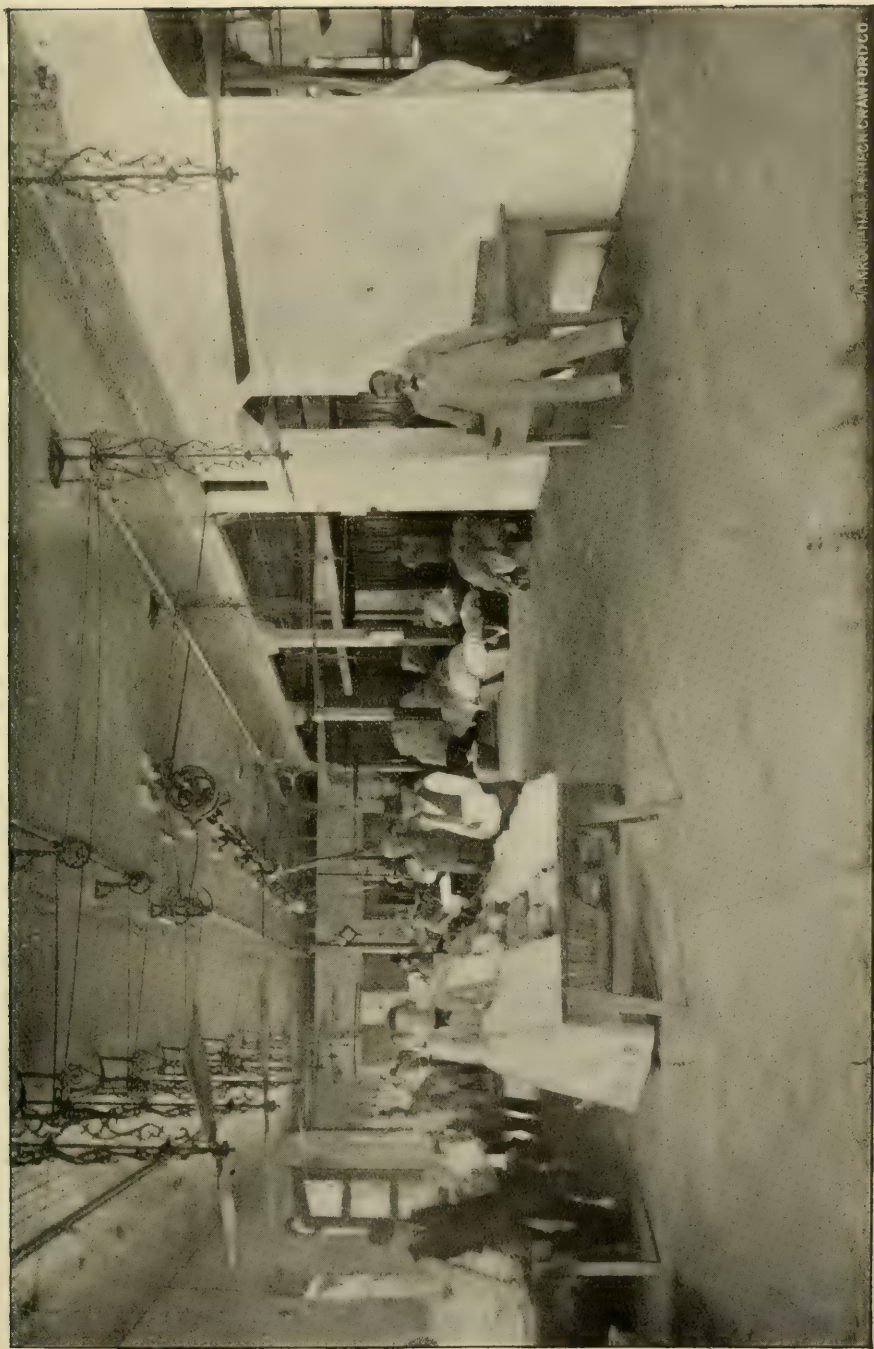
Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.. .. .	3	10	13
One to three months	19	17	36
Three to six months	15	17	32
Six to nine months	12	21	33
Nine months to one year	12	23	35
One year to eighteen months	27	27	54
Eighteen months to two years	21	20	41
Two to three years.	39	46	85
Three to four years	38	43	81
Four to five years	28	41	69
Five to ten years	204	210	414
Ten to fifteen years	127	115	242
Fifteen to twenty years	37	38	75
Twenty to thirty years	10	17	27
Total	592	645	1,237

TABLE No. 17

Showing the occupation of those admitted during the current year and
since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, etc.....	6	.....	6	111	9	120
Commercial:						
Bankers, merchants, ac- countants, clerks, sales- men, shopkeepers, shop- men, stenographers, typewriters, etc.....	20	.....	20	347	5	352
Agricultural and pas- toral:						
Farmers, gardeners, herds- men, etc.....	18	.....	18	266	.....	266
Mechanics, at out door vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....	10	.....	10	141	.....	141
Mechanics, etc., at sed- entary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	7	.....	7	221	1	222
Domestic service:						
Waiters, cooks, servants, etc.....		10	10	37	163	200
Educational and high- er domestic duties:						
Governesses, teachers, stu- dents, housekeepers nurses, etc.....		79	79	26	1,139	1,165
Commercial:						
Shopkeepers, saleswomen, stenographers, type- writers, etc.....		4	4	.....	29	29

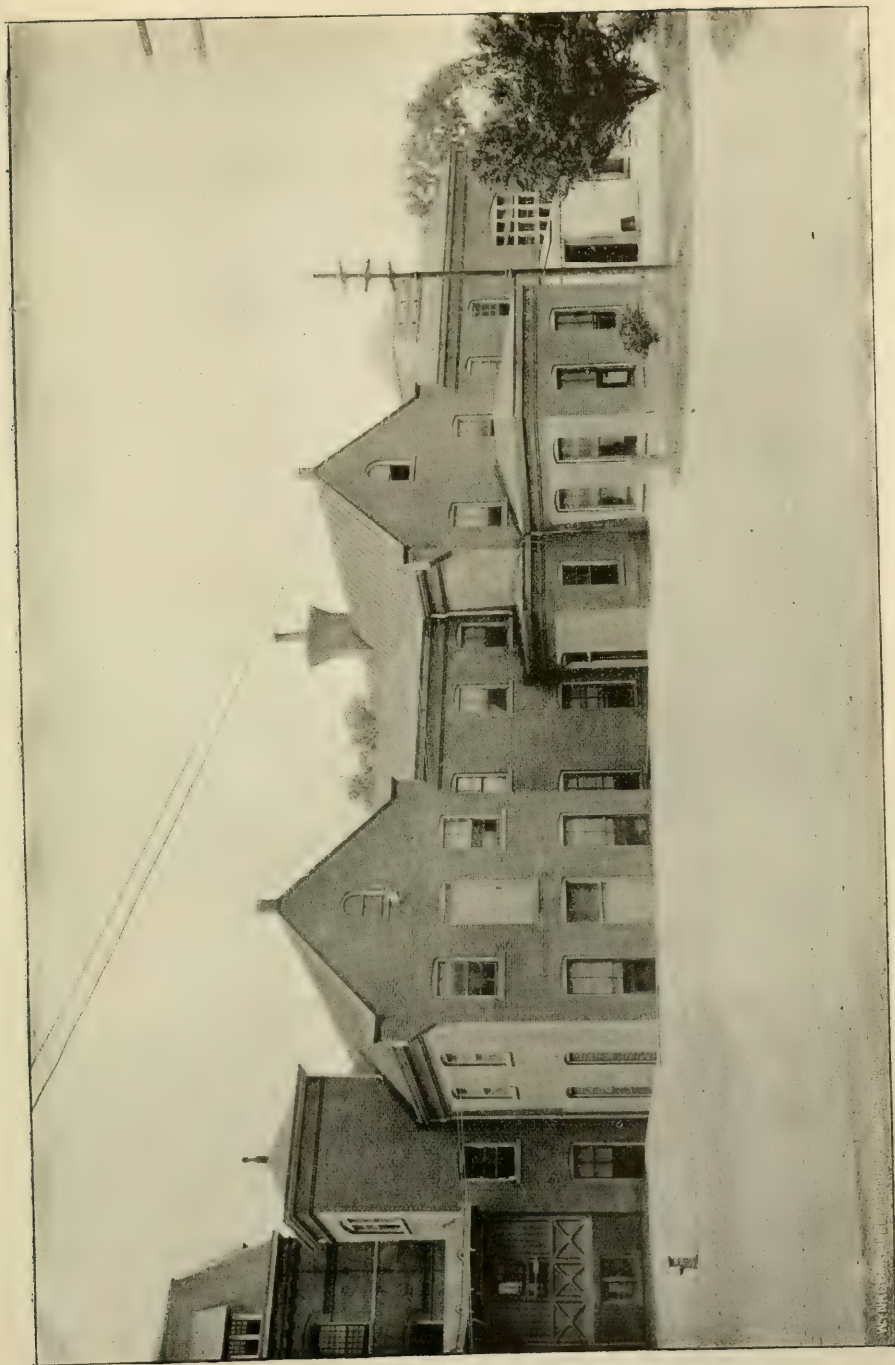


PHOTOGRAPH BY HENRY CRAWFORD CO.

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—GENERAL VIEW IN LAUNDRY.



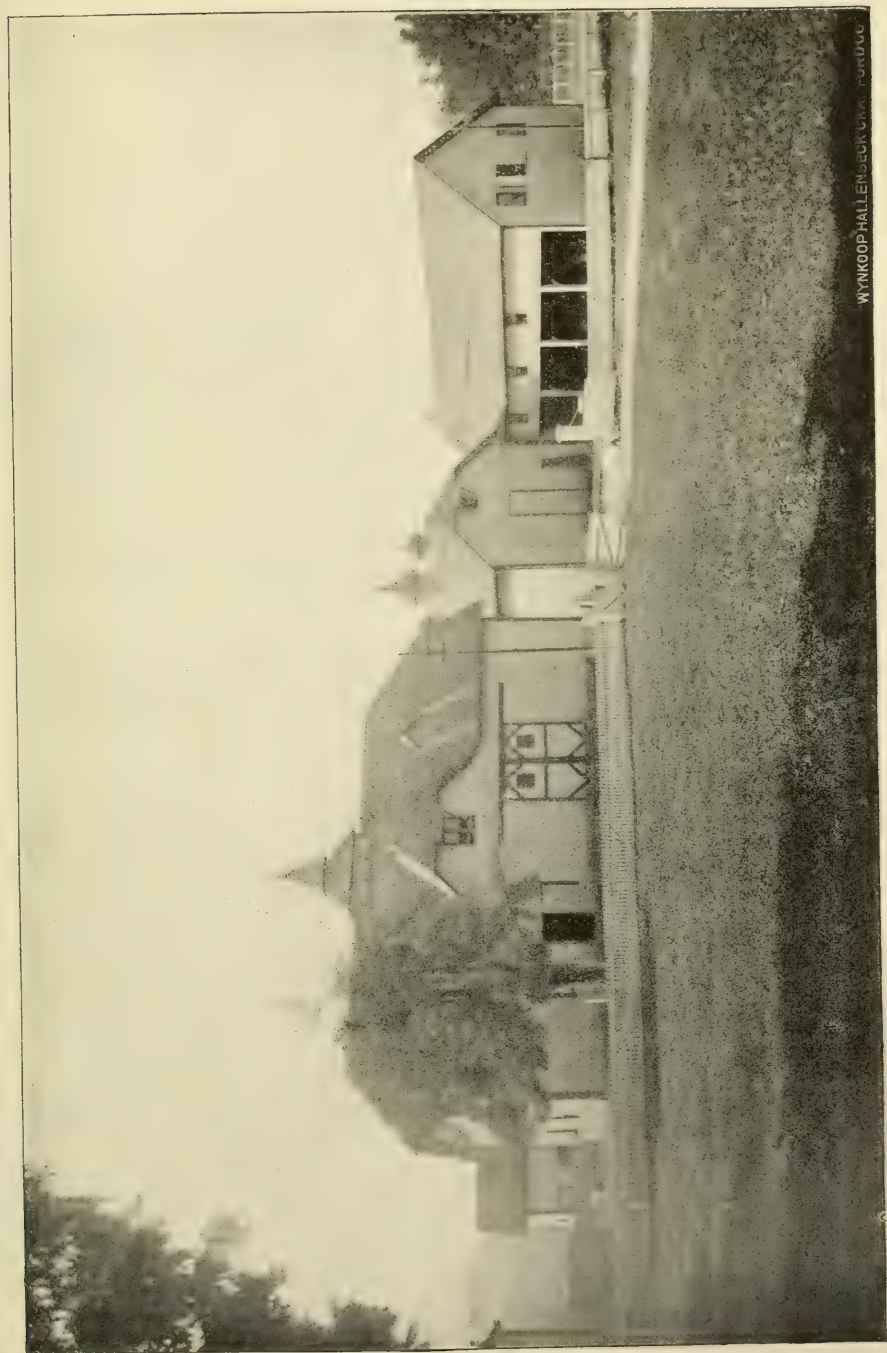
MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—FARM HOUSE AND NURSES' HOME FOR MEN.



MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—BAKERY AND KITCHEN BUILDING.



MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—KITCHEN.



WYNKOOP HALLENSECK CO. PORTUGO

MIDDLETOWN STATE HOMEOPATHIC HOSPITAL.—BARNES.

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Employed in seden- tary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, etc.....	4	4	8	5	85	90
Miners, seamen, etc.....				10		10
Laborers	18		18	386		386
No occupation	11	24	35	182	315	497
Unascertained				7	10	17
Total	94	121	215	1,739	1,756	3,495

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
United States.....	76	100	176	1,371	1,404	2,775
England.....	1	2	3	47	34	81
Ireland.....	4	7	11	141	154	295
Germany.....	8	7	15	98	88	186
France.....				5	10	15
Scotland.....	1	1	2	12	13	25
Canada.....	2	2	4	10	8	18
Switzerland.....				9	3	12
Italy.....	1		1	6	5	11
Bavaria.....				3		3
Prussia.....				3	2	5
Bohemia.....					7	7
Sweden.....		2	2	6	8	14
Saxony.....				1		1
Poland.....				5	1	6
Austria.....				3	4	7
Russia.....				1	4	5
China.....				1		1
Japan.....				1		1
Isle of Man.....					1	1
New Brunswick.....	1		1	1	1	2
Hungary.....					4	4
India.....				3		3
Australia.....				2		2
Holland.....				2		2
Cuba.....				1		1
Norway.....					2	2
Denmark.....					1	1
Armenia.....				1		1
Unascertained.....				6	2	8
Total.....	94	121	215	1,739	1,756	3,495

Of the total number admitted since the 1st of October, 1888, the parents of 34.98 per cent were both of foreign birth.

In 1.94 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 1.78 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Men	Women	Total
Albany.....	2	.....	2
Allegany.....	.....	.....	.....
Broome.....	.....	.....	.....
Cattaraugus.....	.....	.....	.....
Cayuga.....	.....	.....	.....
Chautauqua.....	.....	.....	.....
Chemung.....	.....	.....	.....
Chenango.....	.....	.....	.....
Clinton.....	.....	.....	.....
Columbia.....	.....	.....	.....
Cortland.....	.....	.....	.....
Delaware.....	2	.....	2
Dutchess.....	.....	1	1
Erie.....	.....	.....	.....
Essex.....	.....	.....	.....
Franklin.....	.....	.....	.....
Fulton.....	.....	.....	.....
Genesee.....	.....	.....	.....
Greene.....	1	.....	1
Hamilton.....	.....	.....	.....
Herkimer.....	.....	.....	.....
Jefferson.....	.....	.....	.....
Kings.....	6	.....	6
Lewis.....	.....	.....	.....
Livingston.....	.....	.....	.....
Madison.....	.....	.....	.....
Monroe.....	.....	2	2
Montgomery.....	.....	.....	.....
Nassau.....	.....	1	1
New York.....	22	6	28
Niagara.....	.....	.....	.....
Oneida.....	1	.....	1
Onondaga.....	.....	1	1
Ontario.....	1	.....	1
Orange.....	67	8	75
Orleans.....	.....	.....	.....
Oswego.....	2	.....	2
Otsego.....	.....	.....	.....
Putnam.....	.....	.....	.....
Queens.....	1	.....	1
Rensselaer.....	.....	.....	.....
Richmond.....	.....	.....	.....
Rockland.....	10	2	12
St Lawrence.....	.....	.....	.....

Table No. 19—(Concluded)

COUNTIES	Men	Women	Total
Saratoga	1	1	2
Schenectady	2	1	3
Schoharie			
Schuyler			
Seneca			
Steuben			
Suffolk			
Sullivan	17	4	21
Tioga			
Tompkins		1	1
Ulster	44	3	47
Warren			
Washington	3		3
Wayne			
Westchester	2		2
Wyoming			
Yates			
Soldiers' Home			
Total	184	31	215

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany	8	7	15			
Allegany						
Broome	1		1	1		1
Cattaraugus					1	1
Cayuga	1		1		1	1
Chautauqua		1	1			
Chemung	3	1	4			
Chenango	1	2	3			
Clinton						
Columbia		1	1		1	1
Cortland						
Delaware	2	20	22	1	1	2
Dutchess	1		1		3	3
Erie		1	1			
Essex						
Franklin						
Fulton	1		1	1		1
Genesee						
Greene	1	2	3		1	1
Hamilton						
Herkimer						
Jefferson	1		1		1	1
Kings	22	27	49	9	8	17
Lewis						
Livingston						
Madison	1	2	3		2	2
Monroe		2	2		4	4
Montgomery	1		1			
New York	44	63	107	37	43	80
Niagara						
Oneida	1	1	2	2		2
Onondaga	4	1	5		6	6
Ontario	2		2			
Orange	158	156	314	16	18	34
Orleans						
Oswego		2	2			
Otsego						
Putnam	1		1			
Queens	21	19	40	4	2	6
Rensselaer	1	1	2	2		2
Richmond	8	12	20		1	1

Table No. 20—(Concluded)

COUNTIES.	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Rockland	43	34	77	1	2	3
St Lawrence .....	.....	.....	.....	.....	.....	.....
Saratoga	5	8	13	1	1	2
Schenectady	1	.....	1	1	1	2
Schoharie	1	.....	1	.....	.....	.....
Schuyler .....	.....	.....	.....	.....	.....	.....
Seneca .....	.....	.....	.....	.....	.....	.....
Steuben	1	.....	1	.....	1	1
Suffolk	36	34	70	1	1	2
Sullivan	47	46	93	4	.....	4
Tioga	1	3	4	.....	2	2
Tompkins .....	.....	.....	.....	.....	.....	.....
Ulster	84	87	171	3	4	7
Warren .....	.....	1	1	.....	.....	.....
Washington	2	7	9	.....	1	1
Wayne	2	.....	2	.....	.....	.....
Westchester	9	10	19	2	5	7
Wyoming .....	.....	1	1	1	1	2
Yates .....	.....	.....	.....	.....	.....	.....
Unascertained .....	.....	.....	.....	.....	.....	.....
Total	516	552	1,068	87	112	199

TABLE No. 21

Showing number of patients transferred from other institutions for the insane, number of chronic cases admitted, number of acute cases admitted, and percentage of recoveries on acute cases admitted, during the past ten years

YEAR	Number patients transferred from other hospitals for insane	Number chronic cases admitted	Number acute cases admitted	Percentage of recoveries on acute cases admitted
1892	18	111	228	54.82
1893	26	178	165	64.85
1894	22	105	169	47.34
1895	17	119	159	66.66
1896	12	110	157	63.69
1897	15	91	140	67.14
1898	16	80	156	48.08
1899	7	92	123	64.23
1900	14	76	128	63.28
1901	3	85	130	68.61

TABLE No. 22

General statement of operations of the Middletown State Homeopathic Hospital, from May 1, 1874, to September 30, 1901

YEAR	WHOLE NUMBER ADMITTED			NUMBER DISCHARGED			NUMBER TREATED		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
1874	27	42	69	7	7	14	27	42	69
1875	49	50	99	38	34	72	69	85	154
1876	53	60	113	55	55	110	82	113	195
1877	76	67	143	44	56	100	105	123	228
1878	71	85	156	65	73	138	132	152	284
1879	67	70	137	58	61	119	135	148	283
1880	76	71	147	73	58	131	153	158	311
1881	93	67	160	65	59	124	173	167	340
1882	82	93	175	77	74	151	190	201	391
1883	101	69	170	77	73	150	214	196	410
1884	86	77	163	85	56	141	222	201	423
1885	109	95	204	72	59	131	246	240	486
1886	101	112	213	82	75	157	275	293	568
1887	117	114	231	94	93	187	310	332	642
1888	111	106	217	98	115	213	327	345	672
1889	146	104	250	101	94	195	375	334	709
1890	149	139	288	101	95	196	423	379	802
1891	176	179	355	105	91	196	498	463	961
1892	157	182	339	115	135	250	550	554	1,104
1893	163	180	343	112	107	219	598	599	1,197

1894	145	129	274	111	94	205	631	621	1,252
1895	146	132	278	112	98	210	666	659	1,325
1896	132	135	267	115	106	221	686	696	1,382
1897	108	123	231	104	113	217	679	713	1,392
1898	120	116	236	117	80	197	695	716	1,411
1899	108	107	215	112	129	241	686	743	1,429
1900	95	109	204	81	101	182	669	723	1,392
1901	94	121	215	90	98	188	682	743	1,425
Total	2,958	2,934	5,892	2,366	2,289	4,655	.....	.....	.....

Table No. 22—(Continued)

YEAR	NUMBER DISCHARGED RECOVERED			NUMBER DISCHARGED IMPROVED			NUMBER DISCHARGED UNIMPROVED		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
1874	5	2	7	.....	3	3	.....	.....	.....
1875	15	15	30	5	10	15	9	6	15
1876	26	20	46	7	4	11	13	24	37
1877	21	25	46	10	11	21	7	11	18
1878	26	35	61	7	9	16	18	25	43
1879	20	28	48	12	8	20	13	22	35
1880	34	27	61	12	12	24	20	13	33
1881	31	30	61	11	7	18	12	18	30
1882	36	33	69	6	7	13	22	26	48
1883	41	28	69	9	19	28	15	19	34
1884	38	30	68	9	5	14	23	14	37
1885	37	29	66	5	6	11	12	14	26
1886	41	39	80	10	3	13	21	26	47
1887	43	53	96	12	11	23	24	22	46
1888	40	60	100	13	18	31	22	24	46
1889	42	59	101	20	8	28	23	26	49
1890	56	49	105	16	22	38	11	12	23
1891	55	58	113	19	12	31	3	6	9
1892	43	82	125	18	14	32	15	9	24
1893	48	59	107	10	8	28	4	10	14
1894	30	50	80	22	14	36	5	9	14
1895	48	58	106	8	4	12	3	3	6

1896	55	45	100	13	24	37	2	6	8
1897	43	51	94	17	18	35	4	4	8
1898	38	37	75	15	12	27	14	3	17
1899	38	41	79	23	24	47	6	27	33
1900	37	44	81	9	25	34	1	1	2
1901	33	56	89	18	9	27	2	1	3
Total	1,020	1,143	2,163	336	327	663	324	381	705

Table No. 22—(Concluded)

YEAR	NUMBER DISCHARGED DEAD			NUMBER DISCHARGED ELOPED			NUMBER DISCHARGED NOT INSANE		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
1874	2	2	4						
1875	8	3	11				1		1
1876	6	8	14	2		2			
1877	5	9	14				1		1
1878	11	4	15	2		2	1		1
1879	12	3	15	1		1			
1880	7	6	13						
1881	11	4	15						
1882	13	7	20					1	1
1883	12	6	18	1		1			
1884	14	7	21	1		1			
1885	17	10	27				1		1
1886	10	7	17						
1887	15	7	22						
1888	23	13	36						
1889	14	1	15	2		2			
1890	18	12	30						
1891	28	15	43						
1892	37	30	67	1		1	1		1
1893	49	30	79				1		1
1894	52	21	73	1		1	1		1
1895	51	31	82				1	1	2

1896	43	31	74	..	....	....	..	2	.....	2
1897	37	40	77	....	....	....	....	3	.....	3
1898	50	*27	77	....	....	....	....	1	.....	1
1899	*45	37	82	....	....	....	....	....	.....	....
1900	34	31	65	....	....	....	....	....	.....	....
1901	36	32	68	....	....	....	....	1	.....	1
Total	660	434	1,094	11	.....	11	14	3	.....	17

* Include five admitted "not insane" and discharged dead.

TABLE No. 23

Showing percentage of recoveries, also percentage of deaths on the whole number of patients admitted, average daily population, whole number treated, and whole number discharged since the opening of the institution

YEAR	Number patients admitted	Recovered	Percentage	Average daily population	Recovered	Percentage	Whole number treated	Recovered	Percentage	Whole number discharged	Recovered	Percentage
1874.....	69	7	10.14	31	7	22.58	69	7	10.14	14	7	50.00
1875.....	99	30	30.61	62	30	48.38	154	30	18.48	72	30	41.66
1876.....	113	46	40.70	85	46	54.12	195	46	23.58	110	46	41.81
1877.....	143	46	32.39	110	46	41.82	228	46	20.17	100	46	46.00
1878.....	156	61	39.35	152	61	46.21	284	61	21.44	138	61	44.20
1879.....	137	48	35.03	166	48	28.91	283	48	16.96	119	48	40.33
1880.....	147	61	41.50	186	61	32.70	311	61	19.61	131	61	46.56
1881.....	160	61	38.36	213	61	28.64	340	61	17.94	124	61	49.11
1882.....	175	69	39.65	237	69	29.11	391	69	17.67	151	69	45.69
1883.....	170	69	40.59	265	69	26.03	410	69	16.82	150	69	46.00
1884.....	163	68	41.71	289	68	23.52	423	68	16.07	141	68	48.22
1885.....	204	66	32.51	329	66	20.06	486	66	13.58	131	66	50.38
1886.....	213	80	37.56	410	80	19.51	568	80	14.08	157	80	50.95
1887.....	231	96	41.56	467	96	20.55	642	96	14.98	187	96	51.33
1888.....	217	100	46.08	506	100	19.76	672	100	14.88	213	100	46.94
1889.....	250	101	40.40	536	101	18.84	709	101	14.24	195	101	51.79
1890.....	288	105	36.46	578	105	18.16	802	105	11.84	196	105	53.57
1891.....	355	113	31.83	709	113	15.93	961	113	11.75	196	113	57.65
1892.....	339	125	34.02	827	125	15.11	1104	125	11.32	250	125	50.00
1893.....	343	107	31.28	976	107	10.96	1197	107	8.95	219	107	48.86

1894.....	274	80	29.19	1021	80	7.84	1252	80	6.39	205	80	39.02
1895.....	278	106	38.12	1097	106	9.66	1325	106	8.00	210	106	50.47
1896.....	267	100	37.45	1154	100	8.66	1382	100	7.24	221	100	45.25
1897.....	231	94	40.69	1193	94	7.87	1392	94	6.72	217	94	43.31
1898.....	236	75	31.78	1218	75	6.16	1411	75	5.32	197	75	38.07
1899.....	215	79	36.54	1215	79	6.43	1429	79	5.53	241	79	32.78
1900.....	204	81	39.70	1219	81	6.64	1392	81	5.82	182	81	44.50
1901.....	215	89	41.39	1243	89	7.16	1425	89	6.25	188	89	47.34

Table No. 23—(Concluded)

YEAR	Number patients admitted	Deaths	Percentage	Average daily population	Deaths	Percentage	Whole number treated	Deaths	Percentage	Whole number discharged	Deaths	Percentage
1874.....	69	4	5.65	31	4	12.90	69	4	5.79	14	4	28.57
1875.....	99	11	11.11	62	11	17.74	154	11	7.23	72	11	15.42
1876.....	113	14	12.38	85	14	16.47	195	14	7.17	110	14	12.72
1877.....	143	14	9.79	110	14	12.72	228	14	6.14	100	14	14.00
1878.....	156	15	9.61	132	15	11.36	284	15	5.28	138	15	10.87
1879.....	137	15	10.94	166	15	9.03	283	15	5.30	119	15	12.60
1880.....	147	13	8.84	186	13	6.98	311	13	4.18	131	13	9.92
1881.....	160	15	9.37	213	15	7.04	340	15	4.41	124	15	12.09
1882.....	175	20	11.42	237	20	8.44	391	20	5.11	151	20	13.24
1883.....	170	18	10.57	265	18	6.41	410	18	4.39	150	18	12.00
1884.....	163	21	12.88	289	21	7.26	423	21	4.96	141	21	14.89
1885.....	204	27	13.23	329	27	8.20	486	27	5.55	131	27	20.61
1886.....	213	17	7.98	410	17	4.14	568	17	2.99	157	17	10.83
1887.....	231	22	9.52	467	22	4.71	642	22	3.42	187	22	11.76
1888.....	217	36	18.58	506	36	7.11	672	36	5.35	213	36	16.90
1889.....	250	15	6.00	536	15	2.79	709	15	2.11	195	15	7.69
1890.....	288	30	10.41	578	30	5.19	802	30	3.74	196	30	15.30
1891.....	355	43	12.11	709	43	6.06	961	43	4.47	196	43	21.42
1892.....	339	67	19.76	827	67	8.10	1104	67	6.06	250	67	26.80
1893.....	343	79	23.03	976	79	8.09	1197	79	6.59	219	79	36.07
1894.....	274	73	26.64	1031	73	7.15	1252	73	5.83	205	73	35.61
1895.....	278	82	29.14	1097	82	7.47	1325	82	6.18	210	82	39.04

1896.....	267	74	27.71	1154	74	6.41	1382	74	5.35	221	74	33.30
1897.....	231	77	33.33	1193	77	6.45	1392	77	5.53	217	77	35.48
1898.....	236	77	32.63	1218	77	6.32	1411	77	5.46	197	77	39.09
1899.....	215	82	38.14	1215	82	6.68	1429	82	5.74	241	82	34.02
1900.....	204	65	31.86	1219	65	5.33	1392	65	4.66	182	65	35.71
1901.....	215	68	31.63	1243	68	5.47	1425	68	4.77	188	68	36.17

INDUSTRIAL REPORTS

MATRON'S REPORT

The following is a list of the work accomplished in the sewing rooms during the past year:

Aprons	791
Bags, pastry.....	2
Bandages	944
Bed rings.....	8
Bureau covers.....	22
Burial suits.....	12
Canvas waists.....	18
Caps, bathing.....	5
Chemises	208
Clothes bags.....	457
Coats, duck.....	20
Curtains	166
Cushions	1
Drawers, pairs.....	186
Dresses	349
Dusters	12
Holdes	344
Mitts, pairs.....	55
Napkins	150
Night dresses.....	376
Night shirts.....	826
Pieces mended.....	13,063
Pillow slips.....	3,121
Pillow ticks.....	4
Protection sheet.....	1
Screen covers.....	2
Sheets	4,726
Shirts	307
Skirts	101
Shirt waist.....	1
Spreads	10
Tablecloths	152
Towels	4,824

The following is a list of what has been made in the canning and pickling department:

Catsup, quarts.....	824
Chili sauce, quarts.....	128
Chow chow, quarts.....	9
Cucumbers, pickled, quarts.....	86
Cucumbers, salted, gallons.....	600
Currants, canned, quarts.....	13
Currant jelly, pounds.....	100
Currant juice, quarts.....	15½
Elderberries, quarts.....	50
Gooseberry jam, quarts.....	2
Grapes, canned, quarts.....	13
Grape jelly, pounds.....	15
Grape juice, quarts.....	25
Pears, canned, quarts.....	46
Peaches, canned, quarts.....	44
Peaches, pickled, quarts.....	8
Pineapples, quarts.....	16
Raspberries, canned, quarts.....	25
Strawberries, quarts.....	18½
Tomatoes, canned, quarts.....	9,256
Tomatoes, pickled, gallons.....	75
Wine, dandelion, quarts.....	276

ENGINEER'S REPORT

During the past year the dynamo room has been thoroughly overhauled and rearranged. Two new engines directly connected with two kilowatt 110-volt generators, with new switchboard and necessary instruments to make it complete, have been installed. The old laundry engine has been discarded, and the two old engines and dynamos have been reset and fitted so that either of them will run the laundry and day electric lights at the same time. The old switchboard has been taken down, and the dynamo room has been rewired throughout. A new eight-inch steam line has been run to

the dynamo room. With this arrangement any one of the six boilers can supply steam to the engines. New feeders have been run from the boiler house and laundry, from the dynamo room to the cold-storage building, and the latter wired. New feeders have also been run from the main line of pavilion No. 1 to the new bath tower, and the necessary wiring, fixtures, etc., have been put in. We have made steam and exhaust connections with our engines, provided with proper shut-off valves. New pipes for steam and for hot and cold water supply from the boiler house, connecting with seven washing machines in the laundry, have been made. Three American washing machines have been rebabbitted, and other necessary repairs made. One Empire washer has been repaired, and provided with new cylinder heads; all other laundry machines have been kept in repair. A new 500 horse-power feed-water heater, for heating water for the boiler plant, has been connected to the ten-inch exhaust, and the pipe has been covered with asbestos. A new water supply for our six boilers has been piped from the new heater, a new steam cooker has been placed in ward 12, a new marble basin has been put in the farm cottage, new floor in ward 24, reset engines and connected same at kitchen, put new steam kettle in kitchen, made necessary steam connections for driving De Laval separator, extensive repairs of water supply to cow pasture, connections for milk cooler at new barn have been put in, repaired 500 cans for the canning department, a new cold water supply has been run from annex No. 2 to laundry cottage, put new sink, with drain, for washing wagons at coach house, new steam coils in lavatories of wards 6 and 8, two new water-closets in ward 11, new waste-pipes under sinks in wards 11 and 12, new water supply to urinals on ward 29, new steam kettle in bakery, new steam coil in hot-water boiler in pavilion No. 2, a new pipe fence has been set up at the trolley gate and a new Tobey hot water heater, with a two-inch water supply, has been placed in Talcott hall basement for wards 11 and 12. This heater has ample capacity to heat water for wards 14, 15 and 16 as soon as we are allowed

the necessary material and help to continue this service to those wards. The old charred felt steam-pipe covering has been removed from the steam pipes in the main building, and the pipes have been covered with asbestos. The old wiring, which was twin conductor in the parlors of wards 11 and 12, has been pulled out, and these rooms have been rewired in molding.

The foregoing, with the necessary general repairs throughout the institution, goes to make up the year's work.

CARPENTER'S REPORT

The carpenter presents the following report of work done during the past year:

Built partition for sewing room in ward 12, partition in corridor, waiting-room near trolley, platform and tank for De Laval separator, milk house at new barn and sink for kitchen.

Put new framework in one end of large greenhouse, new shingles on roof of veranda of superintendent's house, new ceiling in milk room, new timbers under roof of dynamo room, trimmings in one room in ward 27, new floor and floor beams in horse stalls in coach-house, new covering on three rollers of mangle in laundry, 225 castors on furniture, 136 handles and rings on bureaus and commodes, 48 sash cords and chains in windows, put on 23 new closet seats and put in 277 panes of glass.

Made 8 stepladders, 60 shipping boxes for pharmacy, 11 tables, 8 flower tubs for florist, cut through doorway and hung new door in ward 10, hospital; cut through attic floor and run elevator to attic for ward 10, hospital.

Upholstered 36 couches, 32 chairs, repaired and hung 133 shades, repaired 902 chairs, 45 settees, 46 upholstered sofas and chairs, 36 mirrors, 18 tables, 33 couches, 128 stands, 31 wardrobes, 57 bureaus, 86 doors, 88 picture frames, 49 window sash, 13 bathtubs, 66 water-closets and 88 commodes.

Many other general repairs have been made throughout the institution and outbuildings.

MASON'S REPORT

During the year ending September 30, 1901, we have built 108 feet of subway in boiler house, engine bed in dynamo room, foundations for two new engines and two new dynamos, brick wall 25 feet long and 6 feet high for oil room in boiler house, steps in corridor between new cold-storage building and annex No. 1, three catch pits and bin for fertilizer in basement of coach-house.

Cut window in Talcott hall sewing-room, two doors in oil room, bricked up window in dynamo room, bricked up double door in dynamo room and fixed floor at bottom of waiter in pavilion No. 2.

Laid foundation for milk house at new barn, foundation for milk separator, flag and concrete walk between new cold-storage building and annex No. 1, flag walk in front of laundry and flag walk between cold-storage building and annex No. 1.

Put in cement floor and cross joints in waiting-room near trolley, cement floor in oil room at boiler house, lathed and plastered partition in dining-room, ward 12; tore out steps at greenhouse and paved 150 feet of gutter in front of laundry and dynamo room.

Repaired for painting wards 1, 2, 3, main building; wards 4, 5, 6, 7, 8 and 9, pavilion No. 1; wards 17, 25, 26, 27, 28, 29 and 30, pavilion No. 2; walls in superintendent's house, 15 rooms on officers' hall and walls in farmhouse.

Repaired chimneys on farmhouse, boilers Nos. 2 and 3, floor in boiler house, flagging over subway, bathroom, ward 28; lavatory in ward 6, floor in bathroom, ward 22; floor in kitchen.

Relaid tile floor in bathroom, ward 17; bathroom floor, ward 23; marble floor in bathroom, ward 29; bottom of oven in bakery.

Tore down and reset two boilers in boiler house, reset registers in wards 4 and 12, stoned up six windows in coach-house and pointed up brick work in coach-house.

Many other small repairs throughout the institution.

PAINTER'S REPORT

The following is a report of work done during the year ending September 30, 1901:

The walls and ceilings in 4 bedrooms, 1 lavatory, and 1 bath room on officers' hall have been painted, calcimined and finished with ornamental border. The woodwork in these rooms has been painted in three colors.

The walls, ceilings and woodwork in wards 5, 6 and 7, also in 5 hospital wards, 3 clothes rooms, 15 bedrooms, 2 parlors, 2 dining-rooms and 2 pantries in pavilion No. 1 have been painted, stenciled, calcimined and varnished. The entrance hall to this building and the sewing room in Talcott hall have been treated in the same manner. One room in ward 15 has been painted and the woodwork enameled white.

In pavilion No. 2 the walls, ceilings and woodwork in the tailor shop, and in wards 23 and 24, also in 1 hospital ward, 1 parlor, 23 bedrooms, 5 dining-rooms, 2 pantries and 2 water sections have been painted, stenciled, calcimined and varnished.

Two hospital wards, 1 dining-room, 1 parlor and 2 water sections on ward 29, annex No. 2, have had one coat of paint on the ceilings, two coats on side walls and an ornamental border. The radiators, pipes, urinals and slop sinks in this ward have received a coat of aluminum paint.

The back stairs in pavilion No. 2 have been painted, finished with a dado 6 feet high and stenciled. The new corridor between annex No. 1 and annex No. 2 has been painted, and the floor finished in shellac.

The woodwork in 10 bathrooms has been painted; the walls, ceilings and woodwork in 6 bathrooms have been painted and varnished; the urinals have received a coat of aluminum paint from time to time; all water-closet seats have received two coats of varnish; 217 bedsteads were enameled white; 102 radiators were coated with gold bronze or aluminum paint, and considerable furniture, such as chairs, benches, screens, tables, etc., have been revarnished.

The Georgia pine floors in 3 dormitories, 14 bedrooms, 3 dining-rooms and 1 parlor in the main building have been finished in paint and varnished; 20 balcony floors, the floors in 46 bedrooms in pavilion No. 1, and the floors in the congregate dining-room and 1 hall on ward 25 have been finished in the same way. The floors in the hospital wards have been treated with various preparations. The paneled oak floors throughout the institution have received, whenever necessary, a coat of shellac.

In the superintendent's house the walls, ceilings and wood-work in 4 rooms were painted, calcimined and enameled; 2 rooms were papered; the front and rear halls received two coats of calcimine; kitchen ceiling calcimined, and walls painted; all woodwork varnished; the stairs, also the floors in dining-room and hall, received two coats of shellac; veranda floor put in good condition.

The woodwork and steel ceiling in dynamo room received two coats of paint; two engines and two dynamos received two coats of paint, two coats of varnish, and striped; boiler fronts and pipes coated with black paint; all tin roofs coated with Prince's metallic; fence in rear of boiler house coated with metallic paint.

The interior and exterior of milk house received two coats of paint; likewise the waiting room near the trolley, and all the woodwork in the interior of coach barn.

Much time has been spent in "touching up" the walls in the various wards and buildings.

LAUNDRYMAN'S REPORT

The total number of pieces laundered during the year was 1,659,118. The total number of pounds of soap made to supply the laundry and the kitchen was 38,520.

FARMER'S REPORT

The following is a report of the farm produce:

Apples, barrels.....	41
Cabbage, heads.....	5,415
Calves raised.....	7
Calves sold.....	25
Calves' skins sold.....	9
Calves slaughtered.....	9
Chickens raised.....	469
Cider, gallons.....	205
Corn ensilage, tons.....	220
Corn, field (ears), bushels.....	100
Corn, sweet, ears.....	45,825
Corn fodder, tons.....	50
Ducks raised.....	10
Eggs, dozens.....	1,716
Green oats and peas for cows, tons.....	20
Hay, tons.....	101
Melons, musk.....	200
Milk, quarts.....	107,709
Pigs raised	195
Pork, pounds.....	32,806
Pumpkins	200
Rye, bushels.....	53
Rye straw, tons.....	3½
Turnips, bushels.....	450
Veal, pounds.....	986

REPORT OF FARM LABOR

During the year the following loads have been drawn: Ashes from boilers, 2,343; coal to cottages, 213; earth for grading, etc., 363; freight from city, 493; flour, potatoes, brick, mortar, leaves, sods, refuse, etc., 548; gravel and sand, 552; ice, 385; stone for various purposes and clearing grounds, 638.

There have been two men and one team constantly employed in

delivering ice, drawing soiled and clean clothing, putting coal in kitchen and bakery, looking after refuse, barrels, etc.

There has been considerable time spent in ploughing and shoveling snow, harvesting and storing ice, raking and drawing leaves, tearing up and seeding abandoned walks, making new walks, digging for new catch pits, sewers, drains and water pipes; trimming trees in groves back of buildings, trimming orchards, clearing large swamp below vegetable cellars, clearing bog meadow and ditching same, cutting underbrush in woods, laying 3,000 feet of new stone wall and repairing the old walls.

GARDENER'S REPORT

The following is a report of the garden produce:

Asparagus, bunches.....	937
Beans, bushels.....	228
Beets, bushels.....	133
Cabbage, heads.....	3,868
Carrots, bushels.....	119
Celery, heads.....	27,990
Cucumbers, bushels.....	281
Currants, quarts.....	825
Egg plants.....	70
Grapes, bushels.....	30
Leeks, bushels.....	30
Lettuce, bushels.....	603
Onions, bushels.....	328
Onions, green, bushels.....	213
Parsnips, bushels.....	175
Pears, bushels.....	21
Peas, bushels.....	114
Peppers	1,250
Radishes, bushels.....	93
Raspberries, quarts.....	388
Rhubarb, bushels	32
Salsify, bushels.....	50

Spinach, bushels.....	50
Strawberries, quarts.....	455
Tomatoes, bushels.....	1,413
Turnips, bushels.....	121

FLORIST'S REPORT

During the past season the florist has made several new beds for flowers, and has set out upon the grounds over 40,000 plants. The new flower beds add very much to the beauty of the grounds. The wards and hospitals have been supplied with cut flowers, palms and plants, and many have been grown for that purpose. New walks have been made near Talcott hall and the cottages, and all the roads and walks have been regraveled. The lawn of ten acres has been mowed regularly, the trees and shrubs have been pruned and the catch basins emptied.

THIRTY-FIRST ANNUAL REPORT
OF THE
BUFFALO STATE HOSPITAL
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

THIRTY-FIRST ANNUAL REPORT OF THE MANAGERS OF THE
BUFFALO STATE HOSPITAL

To the State Commission in Lunacy

Gentlemen.—The managers of the Buffalo State Hospital herewith present their report for the year ending September 30, 1901.

Very respectfully

JOSEPH P. DUDLEY
SHELDON B. BROADHEAD
WALTER P. COOKE
THOMAS LOTHROP
JAMES ATWATER
JESSIE H. JEWETT
ESTHER K. McWILLIAMS

BUFFALO, *October 1, 1901*

OFFICERS

MANAGERS

JOSEPH P. DUDLEY.....	Buffalo
SHELDON B. BROADHEAD.....	Jamestown
THOMAS LOTHROP, M. D.....	Buffalo
WALTER P. COOKE.....	Buffalo
JAMES ATWATER.....	Lockport
Mrs. JESSIE H. JEWETT.....	Buffalo
Mrs. ESTHER K. McWILLIAMS.....	Buffalo

RESIDENT OFFICERS

ARTHUR W. HURD, M. D.....	Superintendent
HENRY P. FROST, M. D.....	First Assistant Physician
GEORGE G. ARMSTRONG, M. D....	Second Assistant Physician
WALTER H. CONLEY, M. D.....	Assistant Physician
JOSEPH B. BETTS, M. D.....	Assistant Physician
EDWIN A. BOWERMAN, M. D.....	Assistant Physician
CHRISTOPHER J. PATTERSON, M. D.,	
	Junior Assistant Physician
EDWARD G. ALDRICH, M. D.....	Junior Assistant Physician
HELENE KUHLMANN, M. D.....	Woman Physician
ALTON L. SMILEY, M. D.....	Medical Interne
JOHN E. CULP.....	Steward

OFFICERS AND COMMITTEES

JOSEPH P. DUDLEY.....	President
SHELDON B. BROADHEAD.....	Vice-President
MORTON K. McMILLAN.....	Secretary and Treasurer

EXECUTIVE COMMITTEE

THOMAS LOTHROP, *Chairman*

MRS. JESSIE H. JEWETT	MRS. ESTHER K. McWILLIAMS
JAMES ATWATER	WALTER P. COOKE

COMMITTEE ON TREASURER'S ACCOUNTS

MRS. ESTHER K. McWILLIAMS, *Chairman*

THOMAS LOTHROP	WALTER P. COOKE
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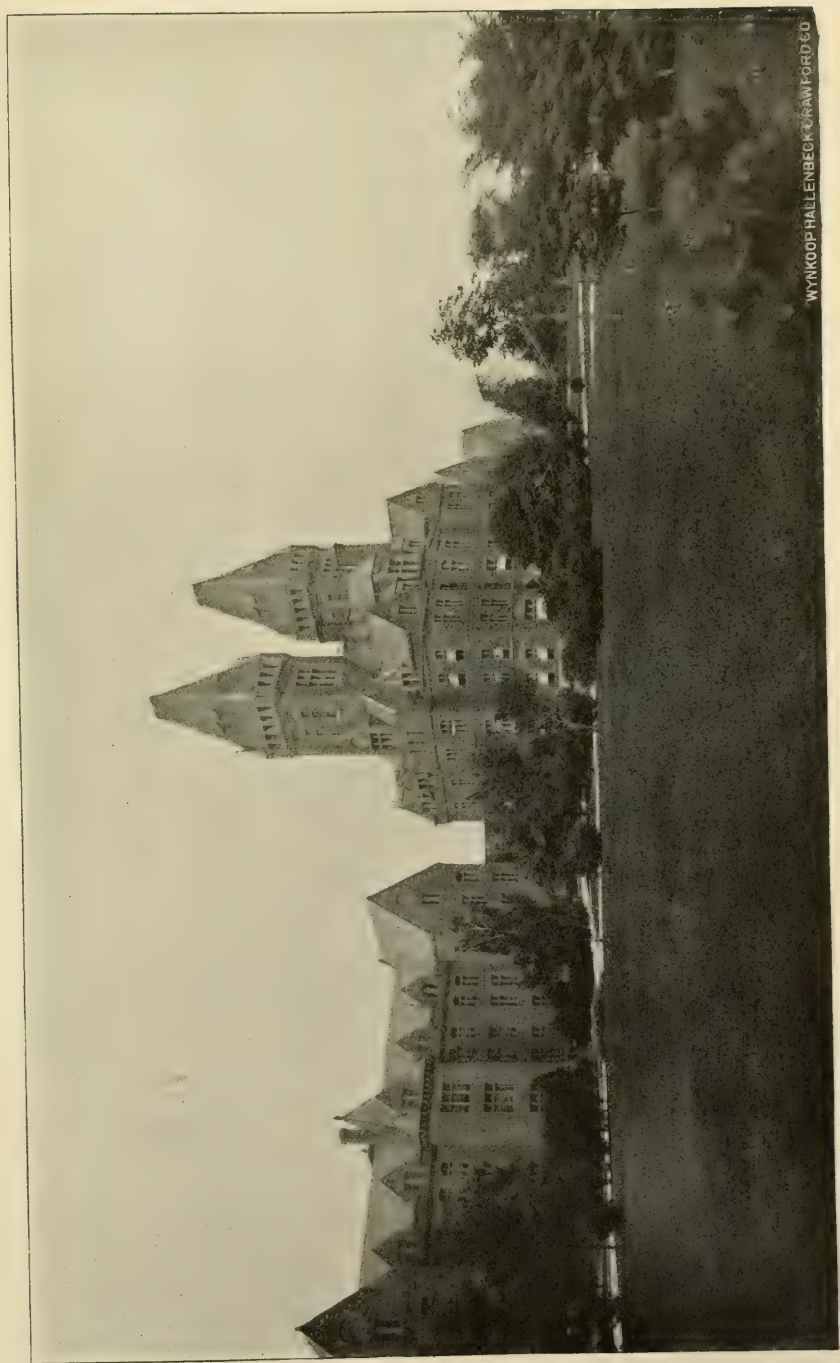
COMMITTEE ON GROUNDS

MRS. JESSIE H. JEWETT, *Chairman*

JAMES ATWATER	MRS. ESTHER K. McWILLIAMS
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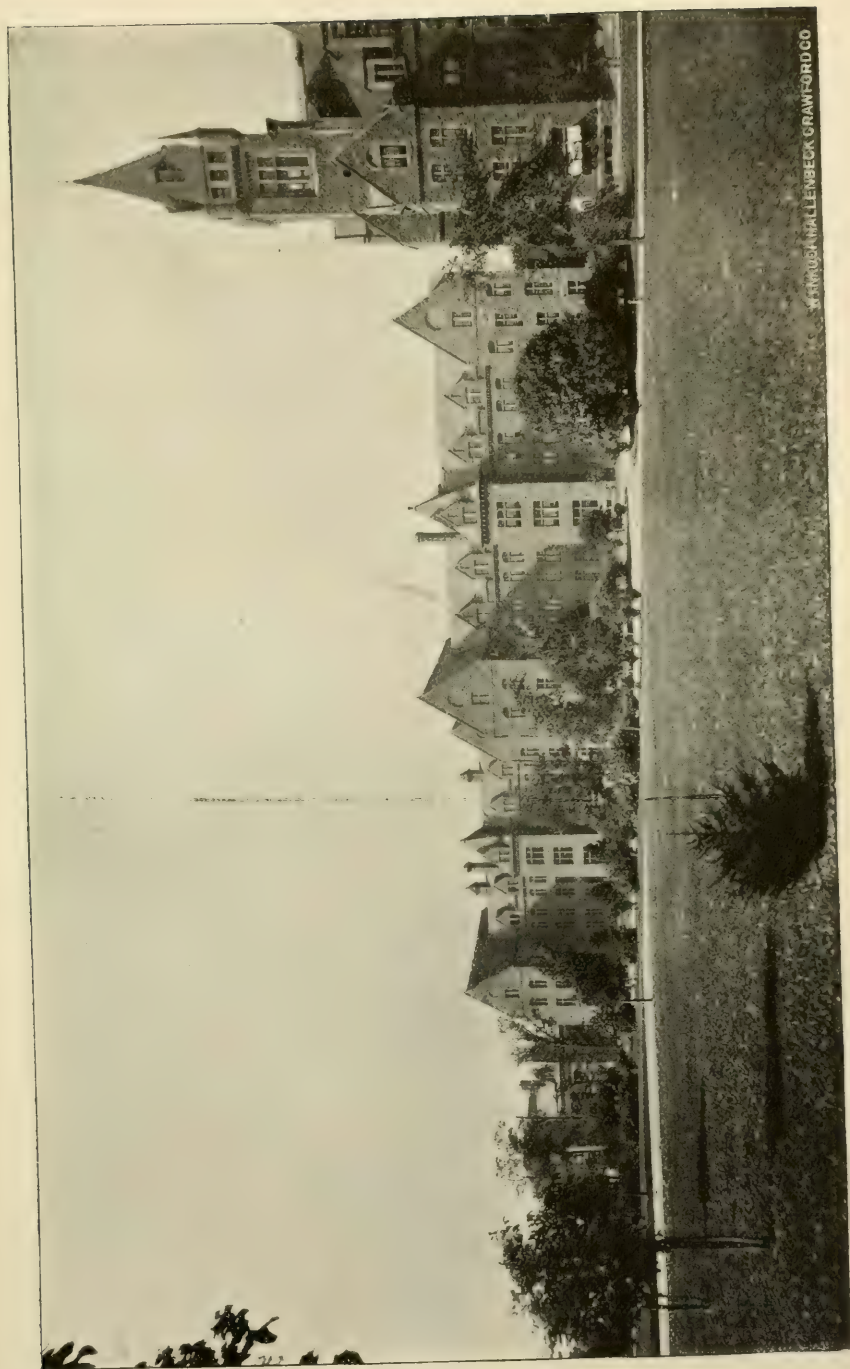
VISITING COMMITTEE

MRS. ESTHER K. McWILLIAMS	THOMAS LOTHROP
MRS. JESSIE H. JEWETT	JAMES ATWATER



WYNKOOP HALLENBECK CRAWFORD & CO

BUFFALO STATE HOSPITAL.—ADMINISTRATION BUILDING.



BUFFALO STATE HOSPITAL.—WEST WING—MAIN BUILDING.

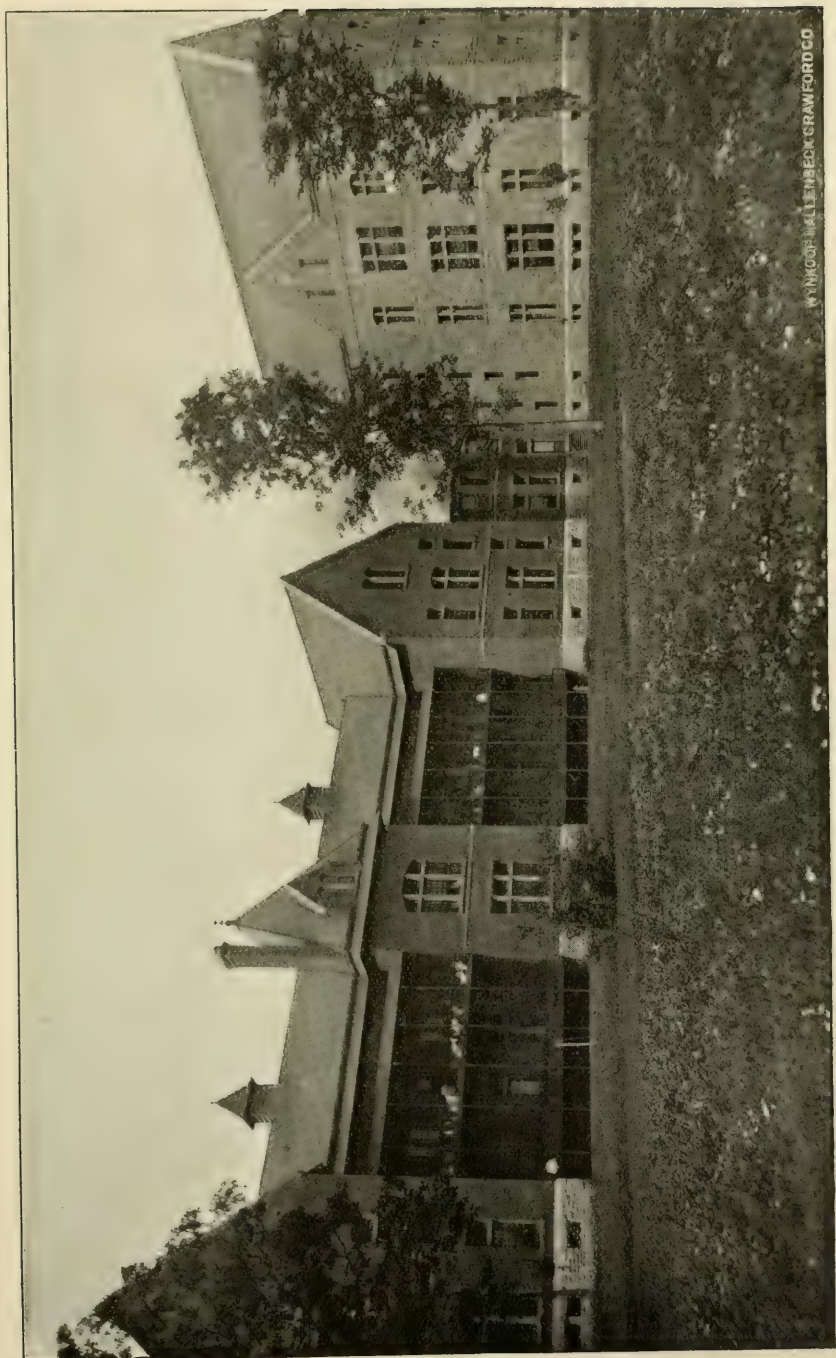
STANDARD HALL LEBECK CRAWFORD CO.



ALLEN BECK CRAWFORD CO.

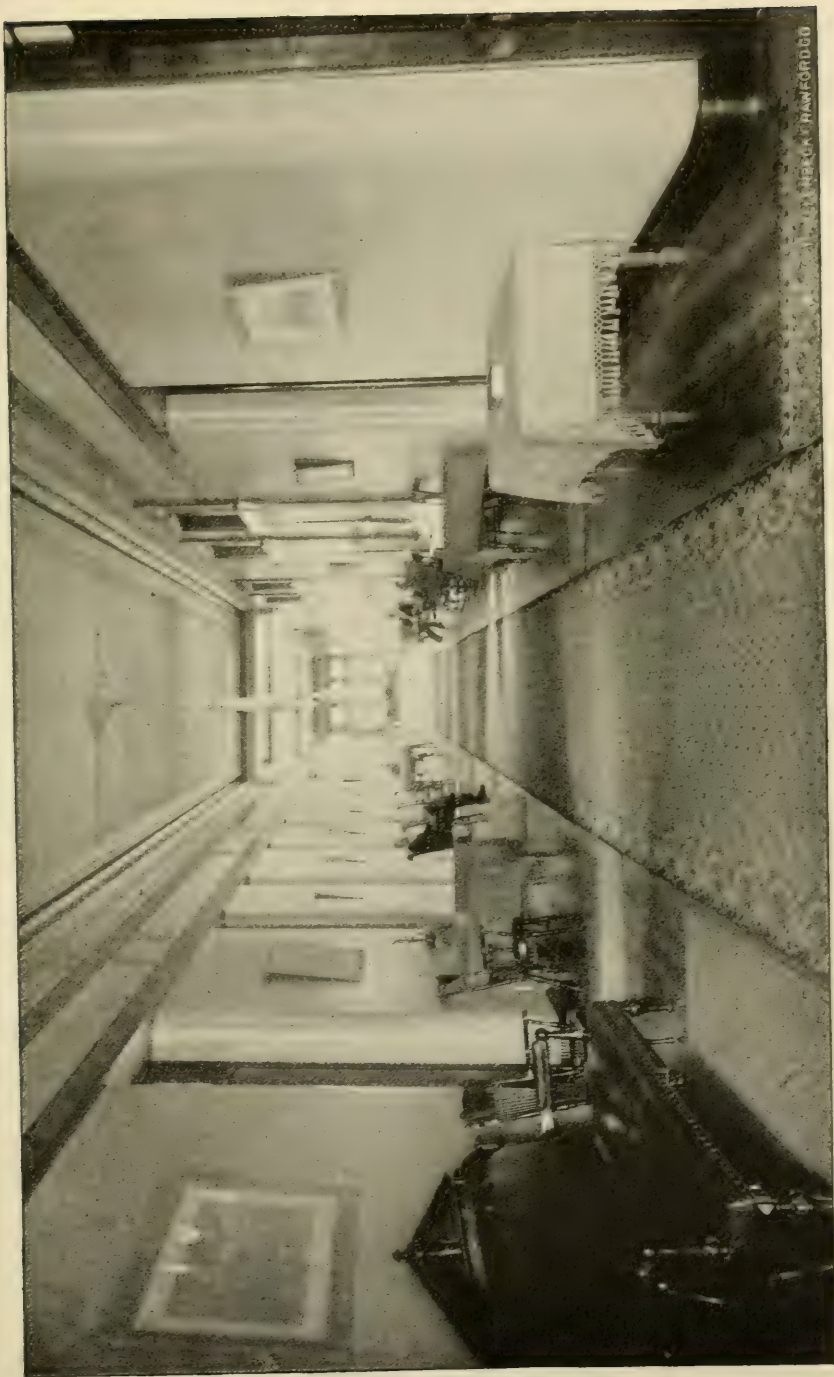
BUFFALO STATE HOSPITAL.—WARD 13, FOR WOMEN.



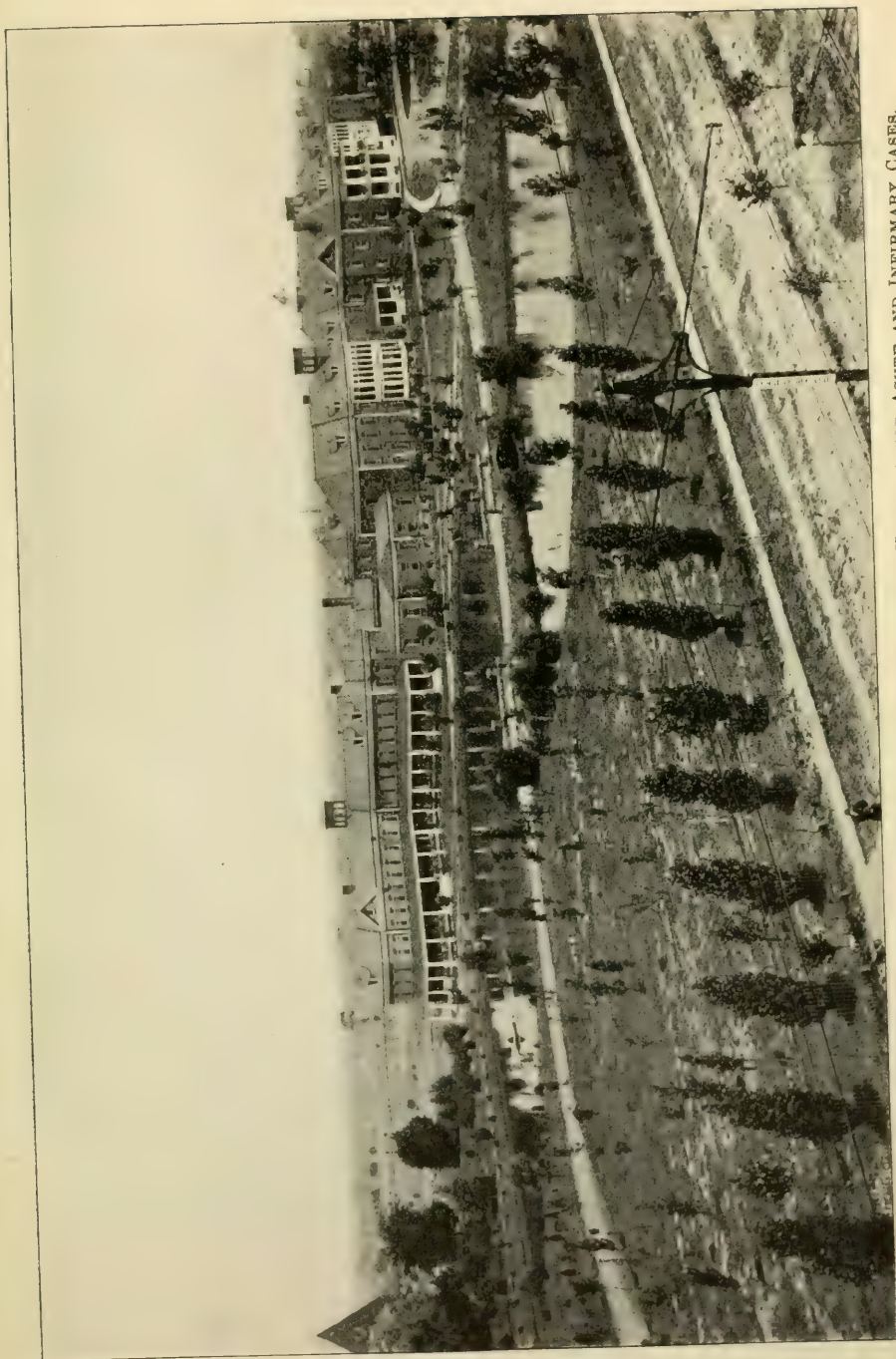


W. NICHOLS HALL & SONS, BUFFALO, N. Y.

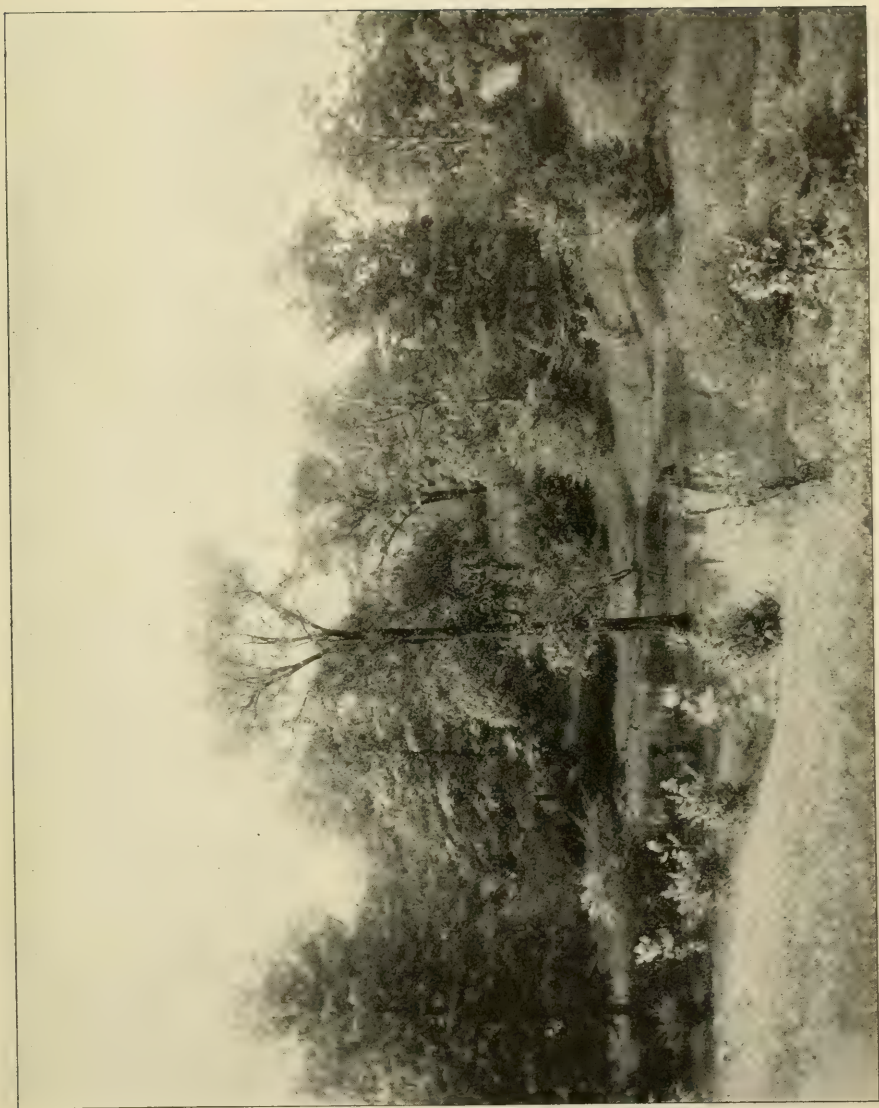
BUFFALO STATE HOSPITAL.—"H" BUILDING.



BUFFALO STATE HOSPITAL.—WARD 11, FOR MEN.



BUFFALO STATE HOSPITAL.—THE ELMWOOD BUILDING—A RECEPTION HOSPITAL FOR ACUTE AND INFIRMARY CASES.



BUFFALO STATE HOSPITAL.—A VIEW ON THE GROUNDS.

REPORT OF THE MANAGERS

The managers of the Buffalo State Hospital, in accordance with the insanity law of 1896, hereby respectfully present to the State Commission in Lunacy their report for the year ending September 30, 1901.

They are pleased to be able to report a successful year in hospital management, notwithstanding the fact that it has been a year of exceptional circumstances and conditions which made the conduct of the institution particularly trying. The Pan-American Exposition grounds were very near, being almost opposite the hospital; the street car line which carried the largest number of visitors bordered the hospital on the easterly side, and the grounds are so arranged that trespassing was invited by the fact that it shortened the distance to a large section of the city. On this account it required extra police precautions to keep stragglers from wandering about the grounds among the patients, interfering with their occupations, diversions, etc.

The crowding mentioned in our last report has continued, but we are promised relief in the near future by the transfer of 100 women patients to the Manhattan State Hospital at Central Islip, L. I. The population of the institution September 30, 1900, was as follows: Men, 843; women, 1,037; total, 1,880. There were admitted to the hospital during the year, men, 228; women, 185; total, 413. Of this number 8 men and 5 women were transferred from other institutions. September 30, 1901, the population was, men, 853; women, 1,060; total, 1,913, showing an increase of, men, 10; women, 23; total, 33. Discharged during the year, 380. The record of discharges shows that there were discharged as recovered, men, 46; women, 44; total, 90; as improved, men, 43; women, 34; total, 77; as unimproved, men, 35; women, 20; total, 55; died, men, 81; women, 59; total, 140.

It will be noticed that there were discharged as recovered and improved 167. This number includes not only those who were entirely restored, but those who were sufficiently recovered to go home to their friends to be cared for by them. Of the number unrecovered, part at least were able to become self-supporting.

The percentage of recoveries on original commitments, omitting the few who were transferred from other institutions, was 22.5, about 1 per cent. less than last year. Of the number of admissions, it will be seen that 265 were born in the United States; the nativity of two was unascertained, and the remainder, 133, were foreign-born, making the percentage of foreign born 50.57—Germany, Canada, Ireland, Poland and England furnishing the larger numbers in the order named.

The managers report that they have held the four quarterly meetings provided for by the by-laws of the institution during the year just closed, and in addition have held twelve executive meetings, at which meetings they have heard reports from the superintendent and treasurer, have attended to such matters as have come up before them, and have followed the routine opening of bids for staple supplies as in the past. In every instance, except where a dealer has formerly proven himself untrustworthy, the lowest bids for staple supplies have been accepted, and in this way the greatest economy has been practiced, but at the same time the quality of the goods has not been neglected nor the comfort of the patients sacrificed. At the annual meeting of the board the by-laws were changed so that the quarterly meetings in January, April and July, might, for the sake of convenience to the managers, be held at their office in the city, the annual meeting, however, being held at the hospital as heretofore. To provide for the visitation, which has been a part of the duties of the managers, a visiting committee, consisting of Dr. Lothrop, Mrs. McWilliams, Mrs. Jewett and Mr. Atwater, was appointed at that time. Members of the committee have visited the hospital at frequent intervals during the year, inspecting the wards, grounds, farm, storehouse, kitchens, etc.,

and talking freely with the patients. During the year bids on plans for new plumbing for the male wards of the main building were opened and the contract was awarded to Mr. Criqui of Buffalo, at his contract price of \$6,647. The work included the furnishing of new water-closets, retiling water-closet floors, removing present washrooms, etc., in eight wards where the plumbing work had been practically unchanged since the institution was completed in 1880. These changes were an absolute necessity, and the work is now nearing completion.

Last year the board of park commissioners requested permission to run a sewer across the hospital grounds in order to accommodate the new boat-house in the park and the Albright Art Gallery, it being impracticable to sewer them into any other street but Grant street, and the route across the hospital grounds being the most direct. As their proposition would enable us to utilize this sewer for our Elmwood building, and thus do away with the Shoen ejector apparatus which was used to raise the sewage to the Forest avenue sewer, and would save the hospital considerable in cost of maintenance, it was accepted, the hospital paying the difference between a twelve and twenty inch sewer. At this writing the work has been completed and we are relieved of the necessity of furnishing steam and attendance required by the ejector system, and the board of park commissioners has been paid the estimated proportion of the cost by the State, viz., \$1,700.

At the time of our last report the request of the trustees of the Albright Art Gallery and the directors of the Pan-American Exposition that the hospital endeavor to use such coal, or combination of coal, as would reduce to a minimum the production of smoke and soot (on account of the effect on the buildings under their control) was noted. We are pleased to be able to report that the combination of bituminous and semianthracite slack coal which was adopted has proved to be perfectly satisfactory, and no complaints of smoke or soot from the hospital boilers have been made.

We are sorry to be compelled to report that the recommenda-

tions made last year for new buildings have not been adopted by the Commission in Lunacy, although we ought in justice to say that the Commission agreed to the erection of a residence for the superintendent, and plans were actually drawn therefor, but after consultation with the Governor it was found that he was opposed to the plan and the work was not continued. A new chapel and amusement hall is much needed; the necessity for it is as great as in former years when we have asked for it, and grows none the less. The necessity of climbing four flights of stairs in order to reach this hall is too much of an effort for many of the older and more feeble patients, and for this reason many are debarred from the satisfaction of attending chapel services or enjoying the entertainments given for their benefit.

At this time, even though it is not a propitious season, we wish to urge the erection upon the grounds of a moderate cost cottage for tuberculosis patients, believing it will be of advantage both to those who are afflicted with consumption and to the rest of the inmates of the buildings; this matter will be referred to in the superintendent's report.

We report the reappointment in January for another term of service of Dr. Thomas Lothrop, who has been manager of this hospital for the past six years—a worthy recognition of his faithfulness to the service of the hospital. The appointment of Walter Platt Cooke, of this city, as manager is also recorded. Mr. Cooke was appointed to fill the unexpired term of Hon. Daniel H. McMillan, who resigned in October, 1900.

Mr. McMillan's long and faithful service to the State of New York in his capacity as manager of the Buffalo State Hospital should have more than a passing notice. He was in point of service the oldest member of the board, having been appointed in the year 1884, and has served continuously since that time. He was appointed on many committees and was always active in promoting the interests of the hospital, and his interest never flagged. In the earlier years, before the hospital had its own attorney, his legal services were always at the disposal of the board of managers and constantly accepted and used to

the great advantage of the institution. It is with regret that we must announce his resignation because of a change of residence to New Mexico on account of ill health.

The grounds of the hospital have received constant attention and the progress noted in former reports, as to planting, cultivating new areas of land for the raising of small fruits, vegetables, etc., has been continued. A large number of the patients is employed in this form of light work, and during this year a larger number of women patients has been pleasantly occupied in light gardening, such as picking berries, peas, etc., than ever before. Our population is large for the acreage of the hospital grounds, closely hemmed in as we are by surrounding residences, and our occupations do not afford employment for as large a percentage as in earlier years when our numbers were less. The beneficial effects of employment are recognized by all who have to do with the care and management of hospitals for the insane. It is to be hoped that still further relief from crowding may be granted.

A great number of changes in the corps of nurses and attendants, especially among male employees, because of the greater attractions in employment offered by the Pan-American Exposition, has rendered the work of the medical staff much more difficult during the past year.

The board feels that the officers, nurses and employees generally have worked faithfully and hard for the success of the past year, and wishes to extend to them its appreciation and thanks. The harmonious relations which have existed between the managers and the officers and employees of all departments have been a matter of congratulation, and emphasizes the value of a single executive head for an institution, and one head only under whose supreme direction all departments can work in harmony for the best good of the patients, which is the object for which the institution exists. Extended experience convinces us of the truth of the observation made by the Lancashire asylums board (England) which, in its volume on the comparative advantages of the different systems throughout Germany, France and Belgium, has this to say as regards unity of manage-

ment in speaking of the asylums of the department of the Seine in France:

"In all the asylums of this department which we visited the director is a layman and there is a physician-in-chief. These have authority independent of each other, and in theory they work together in parallel but separate lines. The director has the general administration, the economy and the domestic arrangements in his charge, while the physician-in-chief is supreme in the wards and in the general management of the patients, and in all that concerns their treatment. Formerly this system was general in France, but to-day it has almost wholly ceased to exist outside of the metropolitan area. It was found that the line of demarcation could not be strictly drawn, and that occasion for difference of opinion and conflict of authority were frequently occurring. It has now become the usual custom to appoint the physician-in-chief as medical director, with control of all departments, and this system has been found to work best."

JOSEPH P. DUDLEY
SHELDON B. BROADHEAD
WALTER P. COOKE
THOMAS LOTHROP
JAMES ATWATER
JESSIE H. JEWETT
ESTHER K. McWILLIAMS

REPORT OF THE TREASURER FOR THE YEAR ENDING SEPT. 30, 1901

(Presented October 15, 1901)

GENERAL FUND

Receipts

Balance on hand from		
last year for salaries..	\$5 00	
Balance on hand from		
last year for wages...	125 71	
Balance on hand from		
last year for supplies..	4,062 82	
	<hr/>	\$4,193 53
From Comptroller for		
salaries	\$20,435 00	
From Comptroller for		
wages	92,700 00	
From Comptroller for		
supplies	186,000 00	
	<hr/>	\$299,135 00
From maintenance of re-		
imbursing patients....	10,371 64	
From maintenance of pri-		
vate patients	6,328 47	
From interest on bank		
balances	130 50	
From steward's return ..	1,204 28	
From board (\$107) and		
criminal insane (\$195)..	302 00	
Transferred from cloth-		
ing manufacturing ac-		
count	2,088 61	
	<hr/>	319,560 50
	<hr/>	\$323,754 03

Disbursements

For amount on vouchers No. 1 to 1,349, inclusive:

Officers' salaries	\$20,331 02	
Wages	92,231 43	
Provisions and stores....	114,472 59	
Ordinary repairs	5,806 03	
Farm and grounds.....	3,409 84	
Clothing	16,436 89	
Furniture and bedding..	10,497 02	
Books and stationery....	1,568 19	
Fuel and light.....	22,935 12	
Medical supplies	3,342 48	
Miscellaneous expenses..	7,835 92	
Transportation of patients	2,220 21	
	<hr/>	\$301,086 74

MANUFACTURING DEPARTMENT

CLOTHING

Receipts from general fund transmitted to State Treasurer.....	17,132 61	
	<hr/>	\$318,219 35
Balance on hand to new account.....		\$5,534 68
		<hr/> <hr/>

SPECIAL FUND

Receipts

Date	APPROPRIATION FOR	Chapter	Laws of	Amount
Oct. 1	Extraordinary improvements. .	364	1900	\$876 18
Nov. 1	Extraordinary improvements...	364	1900	804 96
Dec. 1	Extraordinary improvements...	364	1900	1,058 03
Jan. 31	Extraordinary improvements...	364	1900	164 28
Mch. 4	Extraordinary improvements...	364	1900	35 00
May 4	Extraordinary improvements...	364	1900	347 30
July 6	Extraordinary improvements...	322	1901	1,873 19
Aug. 7	Extraordinary improvements...	322	1901	1,088 78
Sept. 9	Extraordinary improvements...	322	1901	1,257 26
Total receipts.....		.....	.....	\$7,504 98

Payments

Date	VOUCHER NUMBER	Amount
October.....	65 to 72.....	\$876 18
November.....	73 to 84.....	804 96
December.....	85 to 89.....	1,058 03
January.....	90 to 95 ..	164 28
March.....	96.....	35 00
May.....	97 to 111.....	347 30
July.....	1 to 9.....	1,873 19
August.....	10 to 17.....	1,088 78
September.....	18 to 31.....	1,257 26
Total payments.....		\$7,504 98

SUPERINTENDENT'S REPORT

To the Board of Managers of the Buffalo State Hospital

The superintendent hereby makes his thirty-first annual report of the operations of the institution for the year ending September 30, 1901.

MOVEMENT OF PATIENTS

	Men	Women	Total
Patients in hospital September 30, 1900.	843	1,037	1,880
Admitted during the year.....	228	185	413
Total.....	1,071	1,222	2,293
Discharged:			
Recovered.....	46	44	90
Improved.....	43	34	77
Unimproved.....	35	20	55
Died.....	81	59	140
As not insane (inebriates, etc.).....	13	5	18
Total.....	218	162	380
Remaining in hospital September 30,			
1901.....	853	1,060	1,913
Maximum number under care.....	851	1,051	1,902
Minimum number under care.....	828	1,031	1,859
Daily average under care.....	847	1,029	1,876
Percentage of recoveries to number of new admissions.			22.52
Percentage of recoveries to average population.....			4.79
Percentage of recoveries to number discharged.....			23.68
Percentage of recoveries to number discharged, exclusive of deaths, inebriates and transferred.....			46.87
Percentage of recoveries to number of admissions....			21.79
Percentage of recoveries on recoverable cases admitted.			53.57

The average daily population of the hospital during the past year has been, men, 847; women, 1,029; total 1,876, and the relief from crowding, the necessity for which the Commission in Lunacy has appreciated and which has been mentioned in previous reports, is in prospect within a few weeks, or upon the completion of the new buildings at Central Islip, L. I. Our admissions have continued to include a larger number of the feeble and senile class, who, while requiring hospital care and attendance, yet do not contribute to the percentage of recoveries.

The medical work of the hospital has been prosecuted with the same care and diligence as heretofore, and I can speak only in the highest terms of the medical work of the staff. A more conveniently situated room has been taken for a laboratory in the main building and adds much to the convenience and facilities for laboratory work. About 45 autopsies have been performed during the year, complete records kept and notes made, and two of them have formed the basis of published articles by Dr. Frost and Dr. Betts. Articles by the superintendent, Dr. Hurd, and Drs. Frost, Betts and Kuhlmann have been read before different medical societies, or published in medical journals, or both, throughout the year. The gynaecological work of the institution has been under the charge of Dr. Kuhlmann as heretofore; many operations have been performed and the work has been very satisfactorily carried on. Dr. F. Park Lewis, of this city, has continued the ophthalmological work of the hospital for the past year as before, with the same satisfactory results. The dental work, which was established in this hospital some years ago (this being one of the first in the state to secure a dentist), has been under the care of Dr. C. A. Bradshaw as heretofore, and is an indispensable feature of the medical work.

During the past year Dr. Aldrich, of the hospital staff, under the direction of Prof. W. O. Atwater, of Wesleyan University, has made a series of experiments in relation to the assimilative power of certain classes of the insane for comparison with the sane in the hope of securing some practical assistance in con-

struction of dietary tables. The special problem has been to determine just what percentage of food eaten by the quiet chronic class of patients was actually digested. To this end fifteen patients were made subjects of an experiment; they were isolated and for three days kept under constant and special watch to prevent errors. They were given during this time only certain prescribed articles of diet, and all the food taken was carefully weighed and aliquot samples saved from each meal for analysis. Excretions were also carefully weighed and samples preserved, and the diet and general management of the cases were uniform for the series. At the expiration of three days all samples of excretion were evaporated to complete dryness in water oven and taken to the laboratory of Prof. Atwater at Middletown, Conn., for complete and careful analysis. In the chronic insane in fairly good physical condition the normal power of digestion did not vary widely from that in normal individuals, but what differences were observed were in the direction of lessened digestive power as compared with the normal. Although this result was not unexpected, yet a considerable number of experiments will be necessary to show this to be generally true, and these experiments are but the beginning, we hope, of an extended series. Details of the experiments and exact results obtained in the analyses will undoubtedly be fully published by Prof. Atwater and Dr. Aldrich.

In the medical staff of the hospital there have been no changes. The position of medical interne, however, was made vacant again in August by the promotion of Dr. Alton L. Smiley, who had very satisfactorily filled the position since the preceding October, to a position as junior assistant physician on the staff of the Manhattan State Hospital, New York city. As yet we have not been able to secure from the Civil Service Commission a successor.

It is our sad duty to record the death of Mrs. Florence A. Seeley, who for nine years had filled the responsible and trying position of matron at this hospital. Her death occurred on October 28, 1900, after a long illness.

The recommendations made by the managers as regards new buildings require no added comment from me, as the necessity for these has been repeatedly urged. One new recommendation, however, merits a little more extended notice, and that is the request for a moderate priced hospital upon the grounds for tubercular cases. This matter has been brought before the president of the Commission in Lunacy and we feel that he is in sympathy with it. While realizing that the feeling as regards the contagiousness of tuberculosis is, among the general public, exaggerated and fears are unnecessarily maintained in regard thereto, yet the fact remains that unless a fair degree of isolation can be secured it is a source of danger in the crowded hospital. Our means of isolation are limited, especially in the male wing of the hospital, and it is strongly urged that a small hospital to accommodate about fifteen of each sex be established upon the grounds. Many of the patients who die of phthisis are affected before admission here, but some develop it after admission, as patients in a depressed condition of health are prone to do. As institutions grow older this tendency to increased prevalence of tuberculosis becomes more marked, and in certain of the older institutions in the Old World is very alarming. The deaths in this hospital from tuberculosis since 1885 were 101, and according to years are as follows:

1885	6
1886	1
1887	0
1888	2
1889	1
1890	2
1891	5
1892	2
1893	4
1894	9
1895	1
1896	9

1897	11
1898	19
1899	14
1900	15

On August 2d of this year the number of cases in this hospital suffering from tuberculosis was only nine. The percentage of deaths from tuberculosis, based on the total number of deaths in the institution, has risen for a number of years. The average percentage for the past five years, or during the period that the hospital has been unusually crowded, has been 11.6. The average percentage for the five years preceding, or from 1891 to 1896, was 6.9, the year 1895 being omitted because the death rate from tuberculosis was so unusually and phenomenally low as to make it unfair for comparison.

Their segregation in a separate building would add much to their comfort and convenience, and also to that of the inmates of the main hospital buildings; it would also afford those afflicted with tuberculosis more freedom and open-air treatment, and would be desirable in every way. The building could be frame, and if necessary could be built so if its destruction by fire or otherwise seemed necessary, on account of infection, the loss would be inconsiderable. The building should be sufficiently near to the main building to be easy of access for food, etc., and should have ample porch room for the fresh-air treatment of the disease. What can be done in this regard is well exemplified at the Manhattan State Hospital, where the placing of tubercular patients in tents upon the grounds, both summer and winter, is in vogue.

We have received frequent visits from the State Commission in Lunacy, from the managers, and especially from members of the visiting committee of the board of managers, which committee was established one year ago. On September 28th the regular bi-monthly conference of the Commission in Lunacy with the hospital superintendents and some of the stewards was held

at the hospital instead of at Albany, the usual meeting place. The representatives of the different hospitals of the State took occasion to inspect our institution with great care.

On July 25th the hospital was honored with a visit from the Chief Executive, Governor Benjamin Odell, and a number of Senators and Assemblymen. The visit was begun at an early hour and covered pretty much the entire institution, and the Governor made an extensive and quite thorough inspection when the shortness of the time allotted is taken into consideration.

The administration has been for the past year somewhat difficult, owing to the proximity of the Pan-American Exposition and the large number of visitors which were attracted to the hospital. However, the exposition has been a great source of pleasure to the patients, and those capable of attending and enjoying it have been permitted to go, their way being paid out of the amusement fund. In some instances special reductions have been made by certain concessionaires on the grounds, and in this way a great deal of enjoyment has been secured for the patients at a very moderate cost. The patients were afforded 292 admissions to the exposition; small parties accompanied by one attendant were usually allowed to go, and no accident or untoward feature was noted throughout the summer, except the loss of one patient, who was afterward found. While the presence of the exposition has increased the duties, yet to the medical officers it has been a great pleasure to receive the large number of professional and other visitors who have come to the institution. From many countries in Europe, from Cuba, Porto Rico and nearly every State in the Union have come hospital superintendents, physicians, members of boards of managers, governors and other officers interested in institutional work; from England we received two members of a committee on the proposed colony for epileptics at Warford, Cheshire, and we were pleased to give them all the information desired concerning this hospital; also a committee from the Legislature of Missouri, accompanied by an architect, who visited the hospital in relation to plans for a new institution now in process of

erection in that State. It is a satisfaction to be able to record that the visitors, including those from foreign countries, seemed to be pleased with the hospital.

We are pleased to be able to report that the affairs of the hospital, from a medical and economical standpoint, have progressed quietly and successfully. We have but one accident to record—that of the suicide by hanging of a young woman, which occurred despite the watchfulness given her. The case was reported to the coroner and no blame was attached to the attendants. This is the first suicide in this hospital which we have been called upon in years to record, and is a source of distress and regret.

The institution is indebted to the Commission in Lunacy and to the board of managers for constant direction and advice, as well as to the officers, nurses, attendants and employees, whose faithful efforts have made the work of the administration for the past year successful. From an economical point of view the record of the hospital for this year has been satisfactory, the per capita cost for the year being \$160.494, or \$3.086 per week which is below the average of the institutions of the State. This per capita is a trifle higher than last year, but the added cost is explainable by the increased cost of coal and some staples.

TRAINING SCHOOL

The training school has been continued during the past year as heretofore. All members of the staff have in one department or another shared in the duties of instruction. Rotation in service is made so that all of the pupils have an opportunity for service on the wards where there is the most acute sickness. In addition some of the nurses are given instruction in surgical nursing in the Woman's Hospital of this city by special arrangements with Drs. Lothrop and Fredericks. In our graduating class of last June we had 11 men and 25 women, or a total number of 36. We give their names below:

LIST OF GRADUATES, 1901

Women

Martha C. Baker,	Florence M. Campbell,
Cora B. Ralph,	Josephine S. Wales,
Nora Hehir,	Mary E. Fish,
Kate E. Lynch,	Annie Armstrong,
Minnie Clark,	Agnes I. Chalmers,
Margaret E. Russell,	Lottie Stevens,
Winnie Wynne,	Mary R. Kinney,
Julia M. Galvin,	Ethylle E. Jenkins,
Cecelia O'Laughlin,	Ethyl Root,
Kittie C. Maltby,	Alta Turner,
Mae J. Jeffery,	Teresa E. Moore,
Emma A. Kuhn,	Kathryn J. Weighart.
Estelle M. Zurbrick,	

Men

Gustav A. E. Zieman,	Bert G. Hitchcock,
Patrick H. Burke,	Wm. Ormsby,
G. Arthur Payne,	Edmund J. Meyer,
Fred H. Jelley,	James F. O'Shea,
Ernest M. Anderson,	William H. Limburg.
Richard W. Morgan,	

AMUSEMENTS

The amusements and recreations during the winter months have been continued as formerly, including fortnightly dances, band concerts, etc., and have been thoroughly enjoyed as heretofore. The following entertainments have been given:

Entertainments by Allen E. Day, Mrs. Merchant and friends, Mrs. Tillie Inman Fox and sisters, The "Surricks," Salem E. Parker, Frederick Hurd, George E. Little, W. H. McCollin, Myra Churchill Homles; "Chalk Talk on Japan," by Rev. Philip Matzinger, and a lecture on Russia by Mr. Frederick Vogt, and concerts by Buffalo Chamber Music Club, Geneseo Trio, Miss Miller, Willa Kotting, Thomas Rogers and company, and band concert by Wullen's Band.

The religious services have been continued each Sunday, except for a few weeks during the hot summer weather, and the following clergymen have officiated throughout the year:

The Rev. Levi M. Powers, Rev. J. A. McGrath, Rev. Charles E. Rhodes, Rev. F. H. Coman, Rev. J. A. Burns, Rev. Thomas B. Berry, Rev. Louis B. Crane, Rev. F. A. Kahler, Rev. Albert L. Grein, Rev. T. A. Moffat and Rev. Robert Scott.

Appropriate memorial services were held on September 19th in memory of our late President, William McKinley. Rev. Wm. Barnett Wright, of this city, delivered an impressive and eloquent address before a large audience of patients and employees.

LIBRARY

During the past year our library has been moved into a more convenient location, and on two afternoons of each week many patients gather there for the withdrawal of books. Forty-four new books have been added, and we now have 1,111, including works of history, travel, fiction and biography. Our records show that 3,847 books were withdrawn during the year.

We wish to return thanks to the following named persons who from time to time during the year have sent gifts of magazines, newspapers and other reading matter for the use of the patients:

Mrs. Esther K. McWilliams, Mrs. Charles S. Parke, Mrs. J. M. Richmond, Buffalo Public Library, Mrs. H. G. Hopkins, Mrs. Edward Southall, Mr. Sargent, Saturn Club and Richmond Avenue Church of Christ.

Our thanks are also due to the following named newspapers for free copies, which have been greatly appreciated:

Chautauqua Farmer, LeRoy Gazette, Ithaca Democrat, Batavia Daily News, The Evangelist, Christian Uplook, Niagara Courier, Elmira Gazette, Binghamton Democrat, Allegany County Democrat, Olean Gazette, Olean Democrat, Buffalo Sunday News, Buffalo Sunday Times, Rochester Union and Advertiser, Cattaraugus Republican, The Spirit of the Times, Rochester Abendpost Beobachter, Seneca County Courier, Mt. Morris

Union, Ontario County Journal, Addison Advertiser, The Steuben Courier, Dunkirk and Fredonia Union and Advertiser.

For the faithful assistance of the officers and employees who have contributed so much to the successful results of the year, and for the continued cooperation and support of the managers of the hospital and the State Commission in Lunacy, I am deeply grateful.

Respectfully submitted.

ARTHUR W. HURD

Superintendent

October 1, 1901

STEWARD'S REPORT

October 1, 1900, to October 1, 1901

STOCK REPORT

Horses	13
Swine	245
Chickens	150

FARM PRODUCTS

Hay, tons	8
Straw, tons	6 $\frac{3}{4}$
Oats, bushels	177
Pork, pounds	25,984
Lard, pounds	10,141
Eggs, dozen	471
Poultry, pounds	41
Rye, bushels	101

GARDEN PRODUCTS

Asparagus, bunches	583
Beets, bushels	400
Beets, barrels	20
Beet greens, bushels	3 $\frac{1}{4}$
Cabbage, heads	10,596
Carrots, bushels	520
Carrots, barrels	17
Celery, dozen	257
Corn, dozen	878
Cucumbers, dozen	8
Cauliflower, heads	15
Currants, quarts	48
Grapes, baskets	86
Ground cherries, quarts	68
Gooseberries, quarts	128
Lettuce, dozen	928

Lettuce, barrels	39
Onions, green, bunches.....	96
Onions, bushels.....	129½
Potatoes, bushels.....	439
Pie plant, bunches.....	190
Pie plant, barrels.....	4½
Peas, bushels.....	127½
Peas, barrels.....	5
Parsnips, bushels.....	87½
Parsnips, barrels	36
Radishes, dozen bunches.....	319
Radishes, bushels.....	19
Raspberries, quarts.....	137
Spinach, bushels.....	6
Spinach, barrels	21½
Strawberries, quarts.....	99
Turnips, bushels.....	130
Tomatoes, bushels	83
String beans, bushels.....	32½

TAILOR SHOP, ARTICLES MANUFACTURED

Coats, new	466
Vests, new.....	471
Pants, new.....	505
Overalls, new.....	172
Blouse jackets, new.....	9
Jackets, kitchen and dining-room.....	57
Suspenders, new.....	54
Full suits	8
Coats, repaired.....	4,343
Vests, repaired.....	3,270
Pants, repaired.....	4,112
Overcoats, repaired.....	162

SHOE SHOP, ARTICLES MANUFACTURED

Men's shoes, new, pairs.....	453
Women's shoes, new, pairs.....	510
Men's slippers, new, pairs.....	507
Men's shoes and slippers, repaired, pairs.....	1,682
Women's shoes, repaired, pairs.....	504

WORKSHOPS, ARTICLES MADE AND REPAIRED

Single mattresses, made.....	295
Double mattresses, made.....	10
Single mattresses, made over.....	412
Double mattresses, made over.....	2
Canvas mattresses, made.....	15
Pillows, made.....	151
Brooms, made.....	1,777
Scrub brushes, made.....	677
Chairs, recaned.....	369
Large rockers, recaned.....	5
Laundry sacks, made.....	94
Awnings, made.....	10
Couches, upholstered.....	9
Chairs, upholstered.....	2
Cushions, made.....	7

LAUNDRY WORK DONE

Bedding, etc., for patients, about.....	2,100,000
Bedding, etc., for attendants, about.....	145,000
Bedding, etc., for officers, about.....	37,000

TIN SHOP, ARTICLES MADE

Stovepipe, lengths.....	8½
Stovepipe, "T".....	1
Stovepipe, elbows.....	3
Tin pails, 3-pint, dozen.....	8

Tin pails, 1-pint, dozen.....	2
Tin pans, 2-quart, dozen.....	4½
Chimney tops	2
Double dishes, dozen.....	2
Conductor pipe, feet.....	10
Conductor elbows.....	3
Diet pans	6
Iron stands, dozen.....	2
Speaking tube, feet.....	16
Tin can, 3-gallon.....	1
Dust cans.....	12
Fire pails	8
Dustpans, dozen.....	13
Oil cans.....	10
Funnels	7
Galvanized pipe, 6-inch, feet.....	15½
Galvanized pipe, 4-inch, feet.....	4
Galvanized elbows, 6-inch.....	2
Galvanized elbows, 4-inch.....	2
Ventilator	1
Soup ladles, dozen.....	5
Gutter, 14-inch, feet.....	298
Flushing, 7-inch, feet.....	50
Water coolers.....	3
Roof flanges.....	2
Diet pans	12
Wash dishes	4
Dippers	4
Sterilizer	1
Trays	6
Tin cups, dozen.....	17½
Egg whip	1
Copper pan.....	1
Coffee cans.....	12
Smoke consumer.....	1
Dishpans	8

Pudding pans.....	23
Box covers and linings.....	3
Egg turners.....	2
Measures, quart and pint.....	2
Starching pan.....	1
Sink drain.....	1
Meat and vegetable tins.....	24
Tea kettles.....	1
Pudding steamer.....	1
Apple corers.....	8
Sprinklers	13
Hose sprinklers.....	3
Turpentine can cover.....	1
Grater	1
Double boilers.....	5
Muffin tins.....	108
Galvanized pails.....	120
Galvanized pipe, 12-inch, feet.....	14
Galvanized elbows.....	6
Register box.....	1
Hot air box.....	1
Fire shovel.....	1
Sugar tins.....	24
Thimbles, for pipe.....	2
Galvanized pipe, stove, joints.....	9
Cold air boxes.....	2
Rat trap.....	1
Egg lifters.....	3
Perculator	1
Lamp shades.....	2
Scoops	8
Dust conveyor.....	1
Fire place cover.....	1
Diet pail.....	1
Water pail.....	1
Cake tins.....	30

Garbage cans.....	9
Planished iron box.....	1
Milk cooler.....	1
Zinc tank.....	1
Exhaust head.....	1
Potato steamers.....	4
Coal scuttle.....	1
Dough cutters.....	2
Condenser	1
Alcohol lamps.....	2
Drip pans.....	15
Large tin pan.....	1
Dampers	2
Galvanized pipe, 11x30 inch, feet.....	12
Sauce pans.....	4
Sugar box.....	1

FLORAL DEPARTMENT

Anthurium	141
Acaranthus	666
Acalyphas, mixed.....	78
Areca rubia.....	1
Acalypha Sanderi.....	64
Agyratum	163
Alternantheris	1,384
Aspidestra	175
Asparagus, Springeri.....	130
Asparagus, Plumosus.....	68
Adiantum, Farliens.....	65
Abutilon	197
Arancaria, ecelsa.....	15
Begonias, mixed	967
Carnations	350
Cycus, revoluta.....	2
Crotons	43
Calla lillies.....	50

Boston mixed ferns.....	319
Chrysanthemums	877
Cannas	3,000
Calladium Antiquorum.....	227
Cyprus Alternfolense.....	381
Dracena, mixed.....	82
Dracena, Fragrans.....	53
Dieffenbachias	46
Ficus elastica.....	51
Ficus, parcelli.....	5
Geraniums	1,241
Hybiscus, Cooperi.....	59
Hydrangia, Hortensi.....	18
Lantanas	32
Latania	105
Myrtus	47
Petuneas	56
Pandamus Verthi.....	88
Phoenix	145
Heliothrope	12
Philodendrum, Pertussi.....	29
Pancratum	10
Poinsattias	88
Orchids	26
Opihopogon	39
Shipsmatoglottis	55
Kentia Forestereine.....	210
Pandana Utilis.....	1
Roses	35
Fig trees.....	19

MATRON'S REPORT

Articles made in sewing rooms, October 1, 1900, to October 1, 1901:

Abdominal supporters.....	3
Aprons, men's.....	1,053
Aprons, women's.....	2,917
Bandages	2,117
Burial robes.....	51
Bath robes.....	11
Caps, nurses.....	1,216
Caps, kitchen.....	190
Cupboard cloths.....	130
Curtains	628
Curtain bands.....	170
Curtains, sash.....	233
Curtains, scrim.....	41
Chemises	2,197
Clothes bags.....	145
Dresses	2,458
Dress waists.....	19
Dress skirts.....	6
Drawers, cotton.....	1,075
Drawers, domet, women's.....	1,275
Drawers, domet, men's.....	1,645
Dresser covers.....	20
Furniture pads.....	341
Feeding bibs.....	60
Feeding tablecloths.....	54
Ironing holders.....	138
Jackets, women's canton flannel.....	230
Jackets, long sleeve.....	13
Jackets, kitchen.....	73
Laundry bags.....	48
Mattress covers.....	301

Mittens	49
Night dresses.....	732
Neckties	522
Pillow slips.....	5,265
Pillow ticks.....	166
Pillow covers	32
Sheets	7,267
Sheets, protection.....	8
Shirts	1,789
Shirts, night.....	112
Shirts, canton flannel.....	148
Skirts, canton flannel.....	1,605
Shades, window.....	397
Socks, pairs.....	111
Strong blankets.....	13
Tablecloths	1,424
Tray napkins.....	150
Table napkins.....	312
Towels, hand	32
Towels, tea.....	2,220
Towels, hand.....	9,724
Vests, domet, women's.....	2,024
Wrappers, domet, men's.....	1,708
Miscellaneous articles.....	38

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900	843	1,037	1,880
Admitted during year ending Sept. 30, 1901:			
On original commitments:			
From residences	220	180	400
By transfers from county houses	1	2	3
By transfers from other institutions for insane.	7	3	10
Total number under treatment during year.	1,071	1,222	2,293
Daily average population	847	1,029	1,876
Capacity of institution	863	1,018	1,881
Discharged during the year:			
As recovered	46	44	90
As improved	43	34	77
As unimproved	35	20	55
As not insane*	13	5	18
Died	81	59	140
Whole number discharged during the year	218	162	380
Remaining October 1, 1901	853	1,060	1,913

	Men	Women	Total
*Inebriates	8	3	11
Morphine habit	4	2	6
Alcohol and cocaine	1	.....	1
Total	13	5	18

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	November, 1880
Total acreage of grounds and buildings	183
Value of real estate, including buildings	\$2,500,000 00
Value of personal property	107,997 51
Acreage under cultivation	70

Receipts during year, maintenance fund :

Balance on hand October 1, 1900	\$4,193 53
From State Treasury for maintenance on estimates 1 to 12 inclusive	299,135 00
From private patients	6,328 47
From reimbursing patients	10,371 64
From all other sources	3,725 39

Total receipts for maintenance	\$323,754 03
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Total receipts from State Commission in Lunacy for extraordinary improvements	\$7,504 98
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Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries	\$20,331 02
Estimate No. 2. For wages	92,231 43
Estimate No. 3. For provisions and stores.	114,472 59
Estimate No. 4. For ordinary repairs	5,806 03
Estimate No. 5 For farm and grounds	3,409 84
Estimate No. 6. For clothing	16,436 89
Estimate No. 7. For furniture and bedding ...	10,497 02
Estimate No. 8. For books and stationery	1,568 19
Estimate No. 9. For fuel and light	22,935 12
Estimate No. 10. For medical supplies	3,342 48
Estimate No. 11. For miscellaneous expenses	7,835 92
Estimate No. 12. For transportation	2,220 21

Total disbursements, estimates 1 to 12 inclu- sive	\$301,086 74
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Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy	\$7,504 98
Remitted to State Treasurer, sundry receipts, Chapter 580, Laws of 1899	\$17,132 61
Balances October 1, 1901:	
General maintenance fund	\$5,534 68
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive	\$3.086
Maximum rate of wages paid attendants:	
Men	\$34 00
Women	29 00
Minimum rate of wages paid attendants:	
Men	\$20 00
Women	14 00
Proportion of day attendants to average daily population	1 to 11.95
Proportion of night attendants to average daily population	1 to 55.18
Percentage of daily patient population engaged in some kind of useful occupation	64
Estimated value of farm and garden products during year	\$4,937 02
Estimated value of articles made or manufactured by patients during year	21,112 65

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.).....	10	10	20	4	2	6	4
Mental strain, worry and overwork (not included in above)...	12	16	28	4	3	7	2
Religious excitement ..	2	1	3	.....	.....	.....	1
Love affairs (including seduction).....	.....	1	1	.....	.....	.....	.....
Physical:							
Intemperance	48	2	50	5	.....	5	11
Veneral diseases	9	3	12	3	.....	3	1
Masturbation	6	.....	6	.....	.....	.....	.....
Sunstroke	5	.....	5	1	.....	1	2
Accident or injury	6	3	9	1	.....	1	1
Pregnancy .....	.....	3	3	.....	.....	.....	1
Parturition and puerperium.....	.....	10	10	.....	1	1	1
Lactation .....	.....	1	1	.....	.....	.....	.....
Change of life .....	.....	6	6	.....	1	1	.....
Fevers.....	.....	1	1	.....	.....	.....	.....
Epilepsy	14	8	22	1	3	4	4
Diseases of skull and brain	4	5	9	1	2	3	.....
Old age	19	20	39	4	.....	4	7
Exophthalmic goitre .....	.....	1	1	.....	.....	.....	1
Epidemic influenza....	2	2	4	.....	1	1	.....
Abuse of drugs .....	.....	7	7	.....	1	1	1
Other auto-infection ...	1	.....	1	.....	.....	.....	.....
All other bodily disorders and ill health.	13	29	42	.....	7	7	5
Heredity	17	20	37	17	20	37	.....
Congenital defect	6	8	14	.....	3	3	2
Unascertained	40	23	63	3	1	4	21
Not insane	14	5	19	.....	.....	.....	.....
Total	228	185	413	44	45	89	65

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious....	2	1	1	13	6	7
Mania, acute.....	76	43	5	1,136	562	90
Mania, recurrent	6	.....	.....	68	24	5
Mania, chronic	17	.....	7	345	8	39
Melancholia, acute.....	89	44	14	1,349	592	134
Melancholia, simple.....	1	1	.....	8	2	.....
Melancholia, chronic.....	18	.....	6	199	12	54
Alternating (circular) in- sanity.....	4	.....	.....	8	.....	1
Paranoia	11	.....	.....	34	.....	.....
General paralysis.....	30	.....	20	270	.....	245
Dementia, primary.....	8	1	.....	17	4	.....
Dementia, terminal includ- ing secondary ..	90	.....	84	2,051	65	558
Epilepsy with insanity ...	20	.....	3	217	6	45
Imbecility with maniacal attacks.....	17	.....	.....	73	.....	1
Idiocy	5	.....	.....	15	.....	.....
Not insane*	19	.....	.....	197	.....	2
Total	413	90	140	6,000	1,281	1,181

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6
 Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month.....	16	18	34	1	.....	1	237	213	450	24	13	37
One to three months.....	10	12	22	15	7	22	150	140	290	195	106	301
Three to six months.....	5	4	9	12	13	25	71	72	143	185	187	372
Six to nine months.....	4	3	7	9	11	20	40	49	89	115	114	229
Nine months to one year.....	2	1	3	5	3	8	16	10	26	56	61	117
One year to eighteen months.	7	1	8	2	4	6	38	27	65	54	57	111
Eighteen months to two years.	.....	1	1	1	2	3	4	12	16	23	26	49
Two to three years.....	1	.....	1	1	2	3	19	23	42	12	22	34
Three to four years.....	.....	.....	.....	.....	1	1	13	6	19	7	12	19
Four to five years.....	.....	.....	.....	.....	1	1	4	2	6	4	4	8
Five to ten years.....	.....	1	1	.....	.....	.....	6	6	12	2	2	4
Ten to twenty years.....	.....	.....	.....	.....	.....	.....	8	7	15	.....	.....	.....
Unascertained	1	3	4	.....	.....	.....	71	37	108	.....	.....	.....
Total	46	44	90	46	44	90	677	604	1,281	677	604	1,281

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases:						
Typhoid fever					6	6
Diphtheria				2		2
Erysipelas	1		1	8	1	9
Septicemia and pyemia				8	2	10
Dysentery	2	2	4	11	20	31
Syphilis				1		1
Tuberculosis	8	7	15	60	47	107
Diseases of the digestive system:						
Diseases of the stomach				1	1	2
Diseases of the intestines		3	3	32	28	60
Diseases of the liver	1	1	2	3	3	6
Diseases of the peritoneum	1		1	4	1	5
Diseases of the respiratory system:						
Diseases of the nose and larynx ..				2		2
Diseases of the bronchi		1	1	1	4	5
Diseases of the lungs	10	8	18	51	47	98
Diseases of the pleura	1		1	4		4
Diseases of the circulatory system:						
Diseases of the pericardium				1		1
Diseases of the heart	6	6	12	20	24	44
Arterio-sclerosis	1		1	7	1	8
Aneurism				2	2	4
Diseases of the blood and ductless glands:						
Anemia, pernicious anemia and leukemia		1	1	2	4	6
Hodgkin's disease, Addison's disease and myxœdema					1	1
Exophthalmic goitre					2	2
Diseases of the genito-urinary system	5	3	8	23	29	52
Diseases of the nervous system:						
Diseases of the spinal cord				3	1	4
Diseases of the meninges	2		2	19	11	30
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage, and other gross lesions)	4	2	6	39	35	74

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the nervous system :						
Functional nervous diseases (par- alysis agitans, chorea, eclampsia, hysteria, neurasthenia)					2	2
Epilepsy	1		1	22	12	34
Mental diseases :						
Exhaustion of acute mental disease.	3	5	8	69	68	137
Exhaustion of chronic mental dis- ease	6	4	10			
General paralysis of the insane . . .	14	4	18	186	43	229
The intoxications; heat-stroke; obesity :						
Alcoholism				1		1
Debility of old age	13	10	23	77	83	160
Accident				3	2	5
Suicide		1	1	7	5	12
Surgical and gynecological diseases and diseases of the skin				3	3	6
Malignant new growths or cancer	2	1	3	11	10	21
Total	81	59	140	683	498	1181

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	15	12	27	188	147	335
Maternal branch.....	18	17	35	174	207	381
Paternal and maternal branches	1	4	5	17	16	33
Collateral branches.....	13	16	29	213	314	527
No hereditary tendency..	144	109	253	1,520	1,280	2,800
Unascertained	37	27	64	993	931	1,924
Total	228	185	413	3,105	2,895	6,000

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total .
Single.....	99	67	166	1,433	1,019	2,452
Married	98	81	179	1,344	1,306	2,650
Widowed	28	36	64	278	530	808
Divorced	2	1	3	15	21	36
Unascertained	1	.....	1	35	19	54
Total	228	185	413	3,105	2,895	6,000

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	3	.....	3	57	5	62
Academic	13	7	20	148	132	280
Common school	168	141	309	1,827	1,606	3,433
Read and write.....	22	7	29	399	293	692
Read only	10	10	20	162	189	351
No education	10	17	27	204	228	432
Unascertained	2	3	5	308	442	750
Total	228	185	413	3,105	2,895	6,000

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	DURATION PREVIOUS TO ADMISSION			DURATION PREVIOUS TO ADMISSION		
	Men	Women	Total	Men	Women	Total
Under one month	3	4	7	60	52	112
One to three months	8	7	15	78	52	130
Three to six months	9	6	15	53	45	98
Six to nine months	8	2	10	50	24	74
Nine months to one year	1	.....	1	16	10	26
One year to eighteen months ..	14	3	17	66	28	94
Eighteen months to two years ..	1	2	3	19	13	32
Two to three years	5	3	8	50	41	91
Three to four years	6	6	12	31	20	51
Four to six years	4	2	6	30	24	54
Six to ten years	8	5	13	37	29	66
Ten to twenty years	6	11	17	47	32	79
Twenty years and over	3	3	6	30	29	59
Not insane* .....	.....	.....	.....	1	1	2
Unascertained	5	5	10	115	98	213
Total	81	59	140	683	498	1,181
Average duration of insane life (giving years and tenths)	6.0	8.9	7.2	.....	.....	.....
				5.3	7.1	5.65

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years.....				1		1
From 10 to 15 years.....	3	1	4	10	10	20
From 15 to 20 years.....	11	13	24	126	115	241
From 20 to 25 years.....	21	21	42	242	213	455
From 25 to 30 years.....	21	20	41	337	279	616
From 30 to 35 years.....	33	16	49	396	367	763
From 35 to 40 years.....	28	21	49	457	354	811
From 40 to 50 years.....	45	38	83	644	577	1,221
From 50 to 60 years.....	27	22	49	438	475	913
From 60 to 70 years.....	20	16	36	267	290	557
From 70 to 80 years.....	13	12	25	132	168	300
From 80 to 90 years.....	6	4	10	45	38	83
Over 90 years.....		1	1	1	3	4
Unascertained				9	6	15
Total	228	185	413	3,105	2,895	6,000

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years.....	3	6	9	48	67	115
From 20 to 30 years.....	16	16	32	170	198	368
From 30 to 40 years.....	9	14	23	203	167	370
From 40 to 50 years.....	7	4	11	150	90	240
From 50 to 60 years.....	8	4	12	71	60	131
From 60 to 70 years.....	3		3	27	16	43
From 70 to 80 years.....				8	6	14
Total	46	44	90	677	604	1,281

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....				2	2	4
From 15 to 20 years.....	1	1	2	13	5	18
From 20 to 25 years.....	4	.....	4	25	16	41
From 25 to 30 years.....	2	2	4	27	29	56
From 30 to 35 years.....	7	4	11	68	41	109
From 35 to 40 years.....	3	4	7	113	51	164
From 40 to 50 years.....	20	11	31	141	76	217
From 50 to 60 years.....	12	12	24	109	95	204
From 60 to 70 years.....	13	10	23	92	81	173
From 70 to 80 years.....	11	8	19	61	68	129
From 80 to 90 years.....	6	6	12	28	31	59
Over 90 years.....	.....	1	1	1	3	4
Unascertained	2	.....	2	3	.....	3
Total	81	59	140	683	498	1,181

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month	36	28	64
One to three months.....	26	33	59
Three to six months.....	17	17	34
Six to nine months.....	19	11	30
Nine months to one year.....	2	3	5
One year to eighteen months.....	13	14	27
Eighteen months to two years.....	6	.....	6
Two to three years.....	17	14	31
Three to four years	13	7	20
Four to five years.....	8	4	12
Five to ten years	11	14	25
Ten to fifteen years.....	8	9	17
Fifteen to twenty years.....	6	6	12
Twenty to thirty years.....	3	1	4
Thirty years and upwards.....	3	1	4
Not insane*.....	14	5	19
Unascertained	26	18	44
Total.....	228	185	413

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	13	19	32
One to three months.....	51	54	105
Three to six months.....	21	20	41
Six to nine months.....	16	20	36
Nine months to one year.....	22	21	43
One year to eighteen months.....	36	39	75
Eighteen months to two years	50	44	94
Two to three years.....	198	265	463
Three to four years.....	143	134	277
Four to five years.....	49	49	98
Five to ten years.....	203	327	530
Ten to fifteen years.....	47	55	102
Fifteen to twenty years.....	4	12	16
Twenty to thirty years.....	.....	1	1
Total.....	853	1,060	1,913

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional :						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.....	10	.....	10	125	11	136
Commercial :						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.....	32	.....	32	450	8	458
Agricultural and pastoral :						
Farmers, gardeners, herdsmen, etc.....	22	.....	22	499	.....	499
Mechanics and outdoor vocations :						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....	48	.....	48	559	.....	559
Mechanics, etc., at sedentary vocations :						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc....	33	.....	33	348	.....	348
Domestic service :						
Waiters, cooks, servants, etc.....	3	36	39	36	699	735
Educational and higher domestic duties :						
Governesses, teachers, students, housekeepers, nurses, etc.....	.....	113	113	31	1,601	1,632
Commercial :						
Shopkeepers, saleswomen, stenographers, typewriters, etc.....	.....	4	4	.....	30	30

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Employed in seden- tary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, etc		10	10	.....	112	112
Miners, seamen, etc.	5	.....	5	37	.....	37
Prostitutes		2	2	.....	14	14
Laborers	60	.....	60	801	.....	801
No occupation	14	20	34	172	354	526
Unascertained	1	.....	1	47	66	113
Total	228	185	413	3,105	2,895	6,000

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPT. 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Africa				2		2
Armenia				1		1
Australia				2		2
Austria	4	1	5	10	8	18
Barbadoes				2		2
Belgium				1	1	2
Brazil				1		1
Canada	13	12	25	98	153	251
China				1		1
Cuba				1	1	2
Denmark	1		1	5	2	7
England	5	4	9	91	100	191
Finland				3	1	4
France				20	10	30
Germany	26	30	56	433	437	870
Greece	1		1	1		1
Holland	1	1	2	6	7	13
Hungary	2		2	5	6	11
Indian (American)				5	4	9
Ireland	8	13	21	275	436	711
Italy	1	1	2	33	12	45
Jamaica					1	1
Malta				1		1
New Foundland					1	1
Norway	2		2	6	3	9
Poland	5	5	10	40	63	103
Russia	1	1	2	16	14	30
Scotland	1		1	15	21	36
Spain					1	1
Sweden	3	1	4	48	38	86
Switzerland	2		2	15	10	25
Wales		1	1	3	4	7
United States	151	114	265	1,884	1,485	3,369
Unascertained	1	1	2	81	76	157
Total	228	185	413	3,105	2,895	6,000

Of the total number admitted since the 1st of October, 1888, the parents of 60.22 per cent were both of foreign birth.

In 3.23 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 1.63 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany.....			
Allegany.....	1		1
Broome.....			
Cattaraugus.....	3		3
Cayuga.....			
Chautauqua.....		1	1
Chemung.....			
Chenango.....			
Clinton.....			
Columbia.....			
Cortland.....			
Delaware.....			
Dutchess.....			
Erie.....	339	6	345
Essex.....			
Franklin.....			
Fulton.....			
Genesee.....	3		3
Greene.....			
Hamilton.....			
Herkimer.....			
Jefferson.....			
Kings.....			
Lewis.....			
Livingston.....			
Madison.....			
Monroe.....	2		2
Montgomery.....			
Nassau.....			
New York.....	1		1
Niagara.....	36	1	37
Oneida.....			
Onondaga.....			
Ontario.....			
Orange.....			
Orleans.....	3		3
Oswego.....			
Otsego.....			
Putnam.....			
Queens.....			
Rensselaer.....			
Richmond.....			
Rockland.....			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
St Lawrence
Saratoga
Schenectady
Schoharie.....
Schuyler.....
Seneca
Steuben
Suffolk
Sullivan
Tioga
Tompkins
Ulster.....
Warren.....
Washington.....
Wayne
Westchester..
Wyoming.....	16	1	17
Yates
Soldiers' Home.....
Total	404	9	413

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany	1	9	10	.....	.....	.....
Allegany	4	5	9	.....	1	1
Broome	1	.....	1	.....	.....	.....
Cattaraugus	4	4	8	.....	.....	.....
Cayuga .....	.....	3	3	.....	.....	.....
Chautauqua	1	6	7	2	3	5
Chemung .....	.....	2	2	.....	1	1
Chenango .....	.....	.....	.....	.....	.....	.....
Clinton .....	.....	.....	.....	.....	.....	.....
Columbia .....	.....	1	1	.....	.....	.....
Cortland .....	.....	.....	.....	.....	.....	.....
Delaware .....	.....	.....	.....	.....	.....	.....
Dutchess	3	.....	3	.....	.....	.....
Erie	559	608	1,167	6	5	11
Essex .....	.....	.....	.....	.....	.....	.....
Franklin .....	.....	.....	.....	.....	.....	.....
Fulton .....	.....	.....	.....	.....	.....	.....
Genesee	9	20	29	.....	.....	.....
Greene .....	.....	.....	.....	.....	.....	.....
Hamilton .....	.....	.....	.....	.....	.....	.....
Herkimer .....	.....	3	3	.....	.....	.....
Jefferson .....	.....	.....	.....	.....	.....	.....
Kings	1	.....	1	.....	.....	.....
Lewis .....	.....	1	1	.....	.....	.....
Livingston	3	3	6	1	.....	1
Madison	1	1	2	.....	.....	.....
Monroe	23	7	30	1	1	2
Montgomery .....	.....	.....	.....	.....	.....	.....
New York	95	190	285	.....	.....	.....
Niagara	79	94	173	.....	1	1
Oneida .....	.....	3	3	.....	.....	.....
Onondaga	2	5	7	.....	.....	.....
Ontario .....	.....	2	2	.....	.....	.....
Orange .....	.....	2	2	.....	.....	.....
Orleans	8	14	22	.....	.....	.....
Oswego .....	.....	1	1	.....	.....	.....
Otsego .....	.....	.....	.....	.....	.....	.....
Putnam	1	.....	1	.....	.....	.....
Queens	6	5	11	.....	.....	.....
Rensselaer	5	9	14	.....	.....	.....

Table No. 20—(Concluded)

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Richmond	1	6	7			
Rockland		1	1			
St Lawrence						
Saratoga						
Schenectady						
Schoharie						
Schuyler						
Seneca	1		1			
Steuben	1	5	6		1	1
Suffolk	2	2	4			
Sullivan		2	2			
Tioga						
Tompkins	1		1			
Ulster	2	3	5			
Warren						
Washington						
Wayne		4	4			
Westchester	3	4	7			
Wyoming	26	21	47			
Yates		1	1			
Unascertained						
Total	843	1,047	1,890	10	13	23

TWENTY-THIRD ANNUAL REPORT
OF THE
MANAGERS
OF THE
BINGHAMTON STATE HOSPITAL
BINGHAMTON, N. Y.
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

**TWENTY-THIRD ANNUAL REPORT OF THE MANAGERS OF THE
BINGHAMTON STATE HOSPITAL**

To the State Commission in Lunacy

Gentlemen.—We have the honor to submit herewith the twenty-third annual report of the Binghamton State Hospital for the year ending September 30, 1901.

Very respectfully yours

WILLIAM MASON

GEORGE C. BAYLESS

GEORGE H. BARLOW

HENRY L. ARMSTRONG

ANDREW J. FRENCH

THEODORE D. GEER

GEORGE W. FAIRCHILD

OFFICERS OF THE HOSPITAL

MANAGERS

WILLIAM MASON, President.....	Binghamton
GEO. C. BAYLESS, Secretary	Binghamton
THEODORE D. GEER.....	Owego
ANDREW J. FRENCH	Oneida
HENRY L. ARMSTRONG	Elmira
GEORGE H. BARLOW.....	Binghamton
GEORGE W. FAIRCHILD	Oneonta

COUNSEL

HARVEY D. HINMAN	Binghamton
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TREASURER

CLARK Z. OTIS	Binghamton
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RESIDENT OFFICERS

CHARLES G. WAGNER, M. D.....	Superintendent
WILLIAM A. WHITE, M. D.....	First Assistant Physician
ARTHUR P. SUMMERS, M. D.....	Second Assistant Physician
HORACE W. EGGLESTON, M. D.....	Assistant Physician
EDWARD GILLESPIE, M. D.....	Assistant Physician
MARY O'MALLEY, M. D.....	Woman Physician
IRVING LEE WALKER, M. D.....	Medical Interne
EDWIN EVANS	Steward
MRS. LURA SINCLAIR	Matron

REPORT OF THE MANAGERS

To the State Commission in Lunacy

Gentlemen.—In compliance with statutory requirements we as managers of the Binghamton State Hospital submit to your honorable body our annual report, together with the reports of the superintendent and treasurer for the twelve months ending September 30, 1901. During the year covered the affairs of the institution have gone on in an orderly and peaceful manner, and it is with much satisfaction that we record the entire absence of such distressing occurrences as homicide or suicide. With an insane population averaging 1,376 persons daily under care, among whom were many with homicidal or suicidal tendencies, the absence of casualties of any kind is not only a matter for congratulation but also emphatic testimony to the faithfulness with which the hospital force has discharged its duty. The liberal policy in regard to the parole of patients, which has been such a marked feature of the hospital management in preceding years, has been continued, and the privileges thus enjoyed by a large number of our inmates have contributed largely to their comfort and contentment as well as to their bodily and mental health. Among our men patients many are blessed with a superabundance of physical energy which finds vent in manual labor on the farm and in the gardens. These laborers in the hospital vineyard not only contribute materially to its financial welfare, but enjoy better health and sleep more soundly as a result of the exercise gained in the performance of their daily tasks. The farm colonies, where nearly 100 patients find comfortable quarters, continue to give satisfaction, and the plan of caring for a part of the institution's inmates in this manner is now so favorably regarded that the example set by this hospital many years ago is more and more generally followed in other States as well as in our own with each succeeding year.

The superintendent's report shows that there were in the hospital under treatment October 1, 1900, 1,376 patients, of whom

641 were men and 735 were women. There were admitted during the year 226, of whom 124 were men and 102 were women. About one-half of those admitted had been insane many years, and were therefore chronic cases before they came under treatment. There were discharged during the year 122 men and 130 women, a total of 252. Of this number 74 went home recovered, 30 were so much improved that friends were desirous of caring for them at home, 14 were unimproved but sufficiently comfortable to admit of home care, 4 were not insane and 114 died. The average daily population (1,376) was the largest in the history of the hospital.

Although diminished appropriations by the Legislature have lessened the funds available for improvements and repairs, substantial progress has been made at this hospital in many directions. The most important undertaking has been the erection of a new industrial building on the site of the old laundry, which was destroyed by fire four years ago. This building is approximately 100 feet long, 54 feet wide and two stories in height, with a large well-lighted attic which may be finished so as to add practically another story. Here we shall have housed a variety of industries, the most important of which will be the manufacturing of clothing, shoes and other wearing apparel, mattresses, brooms, brushes, etc., all of which are used in the hospital.

The electric lighting plant has been rendered more efficient by replacing an old worn-out dynamo with a new one of the most recent and effective construction. On the main building two fire-escapes give long needed facilities for speedy exit in case of fire. Besides these items of new construction, repairs of greater or less magnitude have been carried on for the betterment of many structures about the hospital plant. In this connection we deem it proper to record our belief that the curtailment of funds for the payment of the wages of employees, noticeable in the appropriations during the past few years, has seriously crippled the work of the hospital. True economy requires that there should be at all times available a sufficient force to main-

tain the plant at its highest efficiency. Your Commission doubtless appreciates that the conditions are not the same in all the hospitals, and that more than the average number of employees is necessary where buildings for patients are detached from the main structure; where farm colonies are maintained at a distance from the home plant, and where the heating, power and pumping station is of necessity located at great disadvantage. During the past four years there has been a steady depletion of our working force until at the present time the reduction has reached 17 per cent. Any further reduction is liable to result disastrously to both patients and property. That the State is undertaking to maintain *hospitals* for the insane and not merely asylums for custodial care is not to be lost sight of. It is therefore our duty to foster hospital methods—the methods best calculated to bring about the recovery of the patients committed to our care. The restoration of the “mind diseased” is not only an act of humanity, but also a great gain to the commonwealth in that a worker is again made self-supporting and not infrequently the provider for a numerous family. Let us then have hospitals in reality rather than in name only and give to our patients every possible aid in their struggle for life and reason.

In discussing this subject the superintendent in his report has explained the need of a special hospital building for acute cases in which there is a reasonable prospect of recovery. In his recommendation we fully concur and would urge upon your Commission the importance of early effort to the end suggested. A building suited to our needs should possess the best modern appliances for the care of the sick, including sanitary plumbing, medicated baths and comfortable furnishings. With such provisions made we are satisfied that the results would be immediate and the economy of the investment would soon be demonstrated. Another improvement that would be of great value from every point of view would be a glass-enclosed veranda at the south end of the Ogden building, where the women cared for on wards 24 and 25 might have the benefit of sunshine—more potent for good than all the drugs in the

Materia Medica. The east building is greatly in need of ventilating apparatus, and several other structures would be improved and made more permanent by the erection of steel ceilings in place of the dilapidated plaster now on many wards. An "extra diet kitchen," an isolation ward for contagious cases, and hospital accommodations for sick employees are necessities that but need mentioning to be appreciated. In the laundry a steam sterilizer should be provided to renovate infected clothing, and in the attics new water tanks should replace those that have outlasted their usefulness.

In the south wing of the main building the pantries should be tiled and new sinks should replace the old ones. The south building kitchen should be enlarged so as to give additional facilities for the preparation of food. The cellar bottoms of several buildings should be cemented for sanitary reasons, many buildings should be painted and a stand pipe in place of the existing leaky reservoir should be provided. The attic of the new industrial building should be finished for shop and storage purposes, and provision should be made for cement walks in various parts of the hospital premises; additional fire protection equipment is needed, as is also additional wood and iron working machinery in the shops. Books for the library and furniture for the wards, a new pig pen, an ice house, a wagon shed, tools and fencing at the farm complete the list of repairs and improvements that we regard as worthy of your early and careful consideration.

RECAPITULATION

Hospital building for acute cases.....	\$50,000
Sun room for hospital wards.....	2,600
Ventilation of buildings.....	3,000
Steel ceilings.....	1,000
Extra diet kitchen.....	300
Isolation ward.....	1,000
Hospital accommodations for employees.....	1,000
Sterilizer	500

Renewal of water tanks.....	.....
Sinks and tiling in main building.....	\$2,000
Addition to south building kitchen.....	1,600
Cementing cellar bottoms.....	2,000
Additional furniture	3,000
Stand pipe	3,000
Painting	1,000
Finishing basement of nurses' home.....	400
Finishing attic of manufacturing building.....	400
New machinery for shops.....	1,200
Fire protection	300
Library books and appliances.....	500
Cement walks	600
Farm renewals	5,300

The treasurer's report is a concise statement of the receipts and expenditures of the year, all of which have been made with the knowledge and approval of your Commission. The report shows that the total receipts on account of maintenance amounted to \$256,548.97, and the total expenditures for the same account were \$241,061.41. The weekly per capita cost for the period covered was \$3.369, as compared with \$3.35 for the preceding year, a result that must be regarded as highly satisfactory when it is remembered that many supplies were purchased at higher prices. Of the money received \$233,451.57 came from the State Comptroller, \$3,175.08 from private patients, \$7,320.23 from reimbursing patients and \$828.99 from sundry sales at the hospital.

The following table is interesting as showing the monthly disbursements for maintenance:

October, 1900.....	\$21,803 00
November, 1900.....	25,401 98
December, 1900.....	22,514 92
January, 1901	22,270 97
February, 1901	20,844 10

March, 1901	\$18,737 28
April, 1901	18,674 93
May, 1901	18,599 87
June, 1901.....	18,222 33
July, 1901	18,835 74
August, 1901	18,021 39
September, 1901	17,134 90
<hr/>	
Total	\$241,061 41
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As regards the personnel of our board we have but one change to record, viz.: The retirement of Dr. John B. Stanbrough, whose term of office expired December 31, 1900. Dr. Stanbrough had been a valued member of the board for a period of nine years, and its president for a considerable part of that time. He was always deeply interested in the welfare of the institution and gave much of his time and attention to its affairs. He was succeeded in January last by Mr. George W. Fairchild, of Oneonta, N. Y. On the 30th of April, 1901, the treasurer, Mr. John Rankin, who had filled the office satisfactorily for seven years, resigned. Prior to his acceptance of the office of treasurer Mr. Rankin had been a trustee of the hospital, and was for many years chairman of the purchasing committee, in which capacity he rendered many and valuable services to the hospital. The vacancy caused by Mr. Rankin's resignation was filled by the election of Mr. Clark Z. Otis, of Binghamton, as treasurer. The only change in the medical staff during the year was the resignation of Dr. Cecil MacCoy, April 30, 1901. After five years of faithful and efficient service in the hospital, Dr. MacCoy resigned to engage in private practice in the city of Brooklyn.

In concluding this report we would express our thanks to Governor Odell, Senators Higgins and Ellsworth, Speaker Nixon and Assemblyman Allds, for the honor of a visit and inspection made by them at the hospital July 30, 1901. Such inspection must necessarily broaden the views of the Executive and of the

legislative officers of the State, and imbue them with a better appreciation of the needs of the State's greatest charity—the State hospital system.

To the members of your Commission individually and collectively we would express our thanks for courteous treatment and careful consideration of the many hospital matters submitted to you during the year, and we would assure you of our cordial cooperation with you in the future. As you are aware, our powers as managers under the present insanity law are limited and our duties are largely advisory, but we believe the influence of our board is nevertheless effective and makes materially for discipline and good conduct throughout the institution.

Respectfully submitted.

WILLIAM MASON
GEORGE H. BARLOW
HENRY L. ARMSTRONG
ANDREW J. FRENCH

REPORT OF THE TREASURER

To the Managers of the Binghamton State Hospital

The treasurer of the hospital respectfully submits the following summary of his receipts and expenditures from October 1, 1900, to October 1, 1901:

GENERAL—OR STATE CARE—FUND

Receipts

Balance from last fiscal year.....	\$9,412 77
Received from private patients.....	3,175 08
Received from reimbursing patients.....	7,320 23
Received from sundry sales.....	828 99
Received from Comptroller.....	233,451 57
Received from interest.....	404 78
Received from other sources.....	1,955 55
	<hr/>
	\$256,548 97
	<hr/> <hr/>

Disbursements

Paid on account of officers' salaries.....	\$16,545 24
Paid on account of wages.....	87,047 36
Paid on account of provisions and stores.....	69,392 68
Paid on account of ordinary repairs.....	5,492 75
Paid on account of farm and grounds.....	6,592 17
Paid on account of clothing.....	10,761 81
Paid on account of furniture.....	3,046 30
Paid on account of bedding.....	3,207 88
Paid on account of books and stationery.....	1,750 42
Paid on account of fuel.....	24,626 84
Paid on account of light.....	840 53
Paid on account of medical supplies.....	1,951 38
Paid on account of miscellaneous expenses.....	7,246 71
Paid on account of transportation of patients.....	2,559 34
Paid State Treasurer, miscellaneous receipts.....	10,900 09
Balance	4,587 47
	<hr/>
	\$256,548 97
	<hr/> <hr/>

CLOTHING MANUFACTURING DEPARTMENT

Receipts

Received from general fund for manufactured goods	\$1,940 58
	<hr/>
	\$1,940 58
	<hr/> <hr/>

Disbursements

Transferred to general fund, cash on hand.....	\$1,940 58
	<hr/>
	\$1,940 58
	<hr/> <hr/>

SPECIAL FUND

Receipts

Received from Comptroller, chapter 570, Laws 1899.	\$261 89
Received from Comptroller, chapter 364, Laws 1900.	11,411 91
Received from Comptroller, chapter 322, Laws 1901.	9,776 49
Received from interest.....	15 58
	<hr/>
	\$21,465 87
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Disbursements

Expended from appropriation, chapter 570, Laws 1899	\$261 89
Expended from appropriation, chapter 364, Laws 1900	11,411 91
Expended from appropriation, chapter 322, Laws 1901	9,776 49
Transferred to general fund, interest.....	15 58
	<hr/>
	\$21,465 87
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Respectfully submitted.

CLARK Z. OTIS

Treasurer

REPORT OF THE SUPERINTENDENT

To the Managers of the Binghamton State Hospital

Gentlemen.—I have the honor to submit herewith my report of the operations and management of the hospital for the year ending September 30, 1901, being the twenty-third annual report of the institution.

Before recording the history of the year's labors and discussing our needs for the coming year, I would ask your attention to the following table, which shows in tabular form the number of patients the hospital has cared for during the twelve months just closed and the results of treatment:

	Men	Women	Total
Remaining in the hospital October 1, 1900	641	735	1,376
Admitted during year.....	124	102	226
	<hr/>	<hr/>	<hr/>
Total number treated.....	765	837	1,602
	<hr/>	<hr/>	<hr/>
Maximum number under care....	662	735	1,397
Minimum number under care....	648	708	1,356
Average daily population.....	649.9	726.1	1,376
	<hr/>	<hr/>	<hr/>
Discharged:			
Recovered	28	46	74
Improved	21	15	36
Unimproved	14	10	24
Not insane	2	2	4
Died	57	57	114
	<hr/>	<hr/>	<hr/>
Total number discharged....	122	130	252
	<hr/>	<hr/>	<hr/>
Remaining September 30, 1901...	643	707	1,350
	<hr/>	<hr/>	<hr/>

Percentage of recoveries:

Based on new admissions.....	32.74
Based on acute or presumably recoverable admissions during the year.....	56.78
Based on number discharged.....	29.36
Based on number discharged, exclusive of deaths, hopelessly chronic, and not insane.....	65.39
Based on average daily population.....	5.37

GENERAL HISTORY—ADMISSIONS

Of the 226 patients admitted during the year, 210 were brought from home, 9 from county houses and 7 from other institutions for the insane. Of the number admitted, 102 were over 50 years of age, 40 were in feeble physical condition, 40 had threatened and 8 had attempted suicide, 39 had threatened and 2 had attempted homicide and 13 had either attempted or threatened both suicide and homicide.

The total number of patients under treatment during the year was 1,602, the largest number under treatment at one time was 1,397, the daily average population was 1,376 and the number remaining under treatment at the end of the year was 1,350.

DISCHARGES

Of the 252 patients discharged during the year, 74 were recovered, and of this number 26 were insane less than one month and 54 were insane less than six months previous to admission, and 66 of the patients discharged as recovered were under treatment less than one year.

Of the 36 patients discharged as improved, 30 returned to their homes, 4 were transferred to other institutions for insane and 2 eloped. Of the 24 patients discharged as unimproved, 14 returned to the care of their friends, 8 were transferred to other institutions for insane and 2 eloped.

There were 114 deaths during the year, and of this number 55 were over 60 years of age, and 60 were under treatment in the hospital for more than two years.

The results of the year are strikingly like the results of the preceding year as regards both the recovery rate of patients under treatment and the cost of maintenance in the hospital. Examination of our tables shows that exactly the same number of patients are recorded as recovered, but the number of deaths is somewhat higher—114 persons died during the year just closed, whereas 106 was the number for the preceding year. This increased death rate may be ascribed in part to an epidemic of typhoid fever which occurred through the winter months and which reappeared in August. The total number of insane patients suffering from this malady was 20, and of this number four died. Besides these inmates of the hospital, 13 employees were attacked by the fever and two of them died. After careful investigation as to the possible cause of this epidemic the conclusion was reached that the water supply was the most probable source of the trouble. When the outbreak occurred in the winter we began boiling the water used for drinking purposes, and when this practice was established cases ceased to occur. The hospital was apparently free from the fever until midsummer, when the practice of putting ice in the water used for drinking purposes prevailed and there was a reappearance of typhoid fever. The ice was immediately suspected as the source of contamination, and to eliminate the possibility of such infection the machinery for manufacturing ice from distilled water was put in operation. As soon as the pure ice obtained in this way was used for cooling the drinking water the epidemic ceased and we have had no new cases developing since September 1, 1901. We are now arranging for the improvement of the water supply in the large well near the pumping station, and we hope to obtain therefrom pure water in sufficient quantity to meet our requirements. In the future, however, to be on the safe side, it will probably be necessary to manufacture sufficient ice for water cooling purposes from distilled water.

During the twelve months covered by this report the hospital has been called upon to care for a larger number of patients

than in any similar period of its history. Its wards have at all times been crowded beyond their proper capacity, and often some disorder has resulted from the close proximity of excitable patients with one another. However, it is with much satisfaction that we record the year's history without any of the accidents or catastrophes that are especially apt to occur in so large a population of insane persons. The policy of giving the utmost personal liberty consistent with safety to our patients has continued a marked feature of the hospital management, and the uniformly good conduct of those of our inmates in whom such confidence has been reposed has given additional proof of the safety as well as humanity of our parole system. Throughout the summer months many of our patients take long walks into the country almost daily, they gather flowers and small fruit from woodlands and hillsides and enjoy better health for the bodily exercise incident to these outings. In the autumn many of these somewhat nomadic members of the hospital family gather quantities of chestnuts, hickory nuts, and butternuts for which they find a ready market in the city, and with the money thus obtained are enabled to provide themselves with articles of clothing that add materially to their comfort and happiness. Others find much pleasure fishing in the river, and the catches they sometimes make are found to be highly acceptable in some of the kitchens.

This idea of personal freedom, combined with individualized treatment, is one of the fundamental principles underlying modern hospital methods of caring for the insane as contradistinguished from the old asylum treatment, which was little better than detention within prison walls. At this hospital we believe more liberal parole is given to patients than at any similar institution in the country, and yet we are confident that the limits of safety in this direction have not yet been reached. At the present time many of our wards are without bars or window gratings of any kind and the doors are open the entire day. Occasionally patients stray beyond the parole allowed them, but with watchful nurses and attendants to look after those that

are not entirely trustworthy we experience little difficulty in keeping all within the fold. Next to the outdoor life, we regard occupation as a most important factor in the general scheme of mental and physical restoration. To the end that facilities for congenial mechanical employment may be afforded to a considerable number, we have during the past year erected a commodious shop building, where industries of many kinds will be carried on by the patients. In the shops we are making nearly all the clothing worn by our inmates, including mittens, boots, shoes and slippers. The table linen and all the bedding, mattresses, etc., used in our dining-rooms and dormitories when made up for use are products of our handiwork. The manufacture of all kinds of brooms and brushes, repairs to furniture, harness and farm and garden utensils occupy a considerable number of patients in a manner both healthful and interesting.

On the wards we believe the grade of service rendered by our nurses and attendants is each succeeding year on a higher plane. Great interest is manifested in the training school for nurses, and many applicants are seeking employment in the hospital for the purpose of availing themselves of its advantages. At the conclusion of the school year in May last there graduated from the senior class 6 men and 9 women, and from the junior class 7 men and 10 women passed their examinations successfully and will form the senior class for the coming year. As to the desirability of maintaining the training school, it may be said that the school has long since passed the experimental stage. Its utility is established and henceforth it must be an essential feature of every well-ordered hospital for the insane. The establishment of a surgery or operating room, an electrical equipment for utilizing static, galvanic and faradic currents as well as the Roentgen ray apparatus, and a department for special dental, ophthalmological and rhinological work has stimulated the zeal of the medical staff in their professional work, and we are prone to believe with markedly beneficial results to our patients. The good results of gynaecological operations performed by Dr. Mary O'Malley have been so immediate

and pronounced as to demonstrate beyond question the value of such treatment in cases where the necessity for it exists. Another method of treatment which as yet has been but tentatively used in the hospital is hypnotic suggestion. This method has been employed by Dr. W. A. White, my first assistant physician, in several cases with such notable results that elaborate reports of them have been prepared for publication and will soon appear in one of the current medical journals. Our experience with hypnosis thus far, although it does not confirm the extravagant claims made by some writers, has demonstrated I believe its utility in dealing with many cases of mental disturbance of a functional nature.

The most important addition to the hospital plant made during the year was the erection of the new manufacturing building, designed to house the industries carried on by our patients. In the electric lighting station a 1,200-light generator has been installed in place of one of the old generators of which the armature had burned out. After careful consideration it was deemed advisable to obtain a new machine of the latest construction rather than to attempt costly repairs on the old generator of a type no longer regarded as good. Fire-escapes, which have long been needed on the main building to afford satisfactory exits in case of fire, have been erected and are now practically completed. In connection with ward 5 the old store-room has been converted into a dining-room for patients. Minor repairs have been made in many of the buildings and much painting, both inside and out, has been done. New eight-inch water mains have been laid to replace a considerable portion of four and six-inch mains formerly in use, in order to give better pressure on the hydrants for protection against fire. The old eight-inch sewer, extending from the hospital buildings to the main fifteen-inch sewer commencing halfway down the hillside, has been replaced by a new fifteen-inch sewer, thus doing away with the overflow of sewage which at times appeared at some of the manholes along the line.

The general results on the farm and in the gardens have been

satisfactory. The corn and potato crops have been unexpectedly good, and our barns are well stored with hay and corn for the winter. The dairy has been greatly improved by additions in the way of young stock raised on the farm and by the purchase of some good cattle to replace dry stock slaughtered. We have at the present time 109 head of cows, 53 head of young cattle and 5 bulls, making a total of 167 head on the farm. These together with about 150 hogs and pigs and 35 horses constitute the live stock belonging to the hospital. Much work has been done in the way of grading the lawns, covering them with top soil for seeding, and about 800 trees have been planted besides many shrubs and smaller plants.

In all of the farm, garden and other outdoor work the aid of our patients has been invaluable. Indeed, without the assistance thus obtained it would have been impossible to accomplish the satisfactory results shown in the large crops that have been harvested. But it is to be remembered that the labor of patients alone is too variable a quantity to be relied upon for farm, garden or other work requiring sustained, intelligent, industry. Under proper guidance patients will accomplish great and good work beneficial to themselves as well as to the hospital, but proper supervision of them must be provided if creditable achievement is to be attained. For several years past there has been an increasing tendency in the Legislature to reduce appropriations for the maintenance of the State hospitals, and especially the wage rolls of the employees until at the present time the hospitals find it necessary to carry on many departments with too small a working force. Should this reduction go still further the interests of both patients and property must necessarily suffer. It is to be hoped therefore that the needs of the hospitals may be brought to the attention of the Legislature in such manner as to secure appreciative consideration and more liberal appropriations.

The following table shows the extent in which patients have found occupation during the year, the kinds of employment and the number engaged in each:

	Men	Women	Total
Dining-room	18,939	18,327	37,266
Fancy work . . . . .	.....	4,304	4,304
Farm	27,153	.....	27,153
Garden	3,470	93	3,563
Grounds	6,183	.....	6,183
Hall work	36,809	49,428	86,237
Heating plant	6,059	.....	6,059
Kitchen	6,753	10,314	17,067
Laundry	6,273	7,734	14,007
Shops	8,800	12,123	20,923
Total	120,439	102,323	222,762

The following classification of the expenditures shows the total cost of maintenance in the several departments of the hospital, and the annual and weekly per capita cost in each:

	Weekly per capita	Annual per capita	Total cost
Officers' salaries	\$0.231	\$12 02	\$16,545 24
Wages	1.217	63 26	87,047 36
Provisions and stores . . . . .	.97	50 43	69,392 68
Ordinary repairs . . . . .	.077	3 99	5,492 75
Farm and grounds . . . . .	.092	4 79	6,592 17
Clothing . . . . .	.15	7 82	10,761 81
Furniture . . . . .	.043	2 22	3,046 30
Bedding . . . . .	.045	2 33	3,207 88
Books and stationery . . . . .	.024	1 27	1,750 42
Fuel . . . . .	.343	17 83	24,534 25
Light . . . . .	.013	68	933 12
Medical supplies . . . . .	.027	1 42	1,951 38
Miscellaneous . . . . .	.101	5 27	7,246 71
Transportation . . . . .	.036	1 86	2,559 34
Total	\$3.369	\$175 19	\$241,061 41

The average purchase price, per capita cost per annum and quantity consumed of staple articles of food for the year ending September 30, 1901, is shown in the following table:

	Average purchase price	Annual per capita cost	Quantity consumed
Fresh meats, per pound.....	\$0.0653	\$12.769	268,753
Poultry, per pound.....	.125	.422	4,645
Wheat flour, per barrel.....	3.469	4.538	1,800
Butter, per pound.....	.208	8.380	55,411
Cheese, per pound.....	.096	.786	11,192
Milk, per quart.....	.033	7.110	292,956
Eggs, per dozen.....	.167	3.146	25,825
Tea, per pound.....	.24	.787	4,503
Coffee, per pound.....	.117	1.619	18,920
Sugar, per pound.....	.0545	2.901	73,279
Fresh fish, per pound.....	.044	1.001	30,972
Potatoes, per bushel.....	.527	2.811	7,328
Crackers, per pound.....	.0452	.309	9,394
Rice, per pound.....	.0476	.266	7,700
Beans, per bushel.....	1.955	.577	406.33
Liquors, distilled, per gallon...	1.719	.269	215.79

REPAIRS AND IMPROVEMENTS.

The maintenance of so large an institution as this hospital necessitates continual repairs and improvements. Old structures require renovating, and in some instances buildings that have outlived their usefulness should be replaced by new structures. Sunshine and rain leave their marks on our buildings and besides the damage done by the elements the wear and tear of daily use by both the sane and the insane result in more or less destruction. The following suggestions but outline our needs. They are offered for your consideration:

A HOSPITAL BUILDING FOR ACUTE CASES.

The need of a building with suitable wards and other conveniences for the care of acute cases of insanity has been felt for several years past. With our constantly increasing population this need is becoming more and more urgent. We are receiving each year many patients suffering from acute attacks of mental derangement who ought under proper conditions of environment and adequate nursing and medical attention to get well, but who in some instances at least I believe fail to recover simply because it is impossible for us under existing conditions to provide them with the care they should have. The value of a hospital building especially designed for these cases can scarcely be overestimated, for besides the incalculable boon that restored health is to the patient and his family, there would be a large direct gain to the State in the relief afforded from the care of an incurable patient who by reason of chronic insanity must become a permanent tax upon its charity. The average cost for the maintenance of an insane person is not far from \$200 per annum, and the duration of life about fifteen years. It will therefore be readily appreciated that for each one of these patients restored to health and activity as a worker among his fellows there must be a corresponding saving of thousands of dollars. To meet our needs at the present time a building consisting of four comparatively small wards should be erected. There should be provided single rooms, lavatories, a special diet kitchen, sanitary plumbing and the most approved ventilating apparatus. Sun rooms and verandas would also be important features of the construction. We believe that a building suitable for the purposes here outlined and large enough to accommodate sixty patients could be erected for \$50,000.

SUN ROOM FOR HOSPITAL WARDS.

In connection with the main hospital building we have two wards known as 24 and 25, where the acute cases among the women patients are now cared for. These wards are small and

not well lighted. At the southern end of the building in which they are situated it would be an easy matter to construct spacious verandas arranged so as to be enclosed in glass during the winter months. Here the patients from these wards might enjoy the sunshine on bright days from morning until night. The benefit they would thus derive would be great, for it is a well-known fact that the open air and bright sun light are powerful restorative agents in practically all forms of illness. These verandas would be especially available for the feeble and aged women who come to us suffering from mental disease, and who are not strong enough to take exercise in the ordinary manner. Here they might be made comfortable while deriving every possible advantage from the sun's rays. The cost of the construction contemplated would not exceed \$2,600.

VENTILATION OF BUILDINGS

The four large cottage buildings situated somewhat apart from the main hospital building are in need of artificial ventilating apparatus. Electric fans should be installed so that the air throughout the apartments occupied by patients might be changed with sufficient frequency to remove all contamination. The east building is especially in need of such ventilating apparatus. The wards and dormitories of this building are more crowded than any other part of the institution, and the dormitories especially are often in a condition far from healthful. We are advised by the State Architect that with suitable fans properly connected with the air-shafts the air throughout the building might be kept wholesome at all times. The exact cost of such installation has not been ascertained, but we believe that all of these buildings might be equipped with the needed outfit for a sum not exceeding \$3,000.

STEEL CEILINGS

In many of the older wards where ceilings of plaster exist much trouble has been experienced in consequence of this material becoming loosened and falling to the floor. These wards

and some of the adjacent corridors would be greatly improved by the erection of steel ceilings, which experience has demonstrated form the most durable and satisfactory construction known for ward use. Ceilings of this kind are especially needed in the south and west buildings and in some of the apartments at the farm cottages. The approximate cost of this work, together with the material required, would be \$1,000.

EXTRA DIET KITCHEN

Provision should be made apart from the main kitchen for an extra diet kitchen in which to provide food especially for the sick. There are many times patients in the hospital who need special attention and unusual care in regard to diet. Such a kitchen might be easily fitted up in a small room now used as a scullery, and it would be easy to provide it with all necessary cooking apparatus at moderate cost. The sum required would be approximately \$300.

ISOLATION WARD

There should be erected on the hospital premises a small building for the care and treatment of contagious diseases and of suspected cases. In view of the experience with diphtheria at one of the other State hospitals the importance of such provision can scarcely be overestimated. During the past year this hospital has been called upon to cope with two epidemics of typhoid fever, in both of which much embarrassment has been experienced because of our having no place to care for these cases except on the ordinary wards for the insane. A simple structure suitable for our purposes could be erected for approximately \$500, and its equipment in the way of plumbing, heating, etc., would amount to about as much more, making the total cost about \$1,000.

HOSPITAL ACCOMMODATIONS FOR EMPLOYEES

The epidemic of typhoid fever above referred to invaded the ranks of our employees, a number of whom were very ill and two died. Owing to our total lack of hospital provision for such

cases we were obliged to care for them on the wards with insane patients, a method of procedure which could not fail to aggravate the malady and imperil recovery. It would seem but reasonable and proper in such a large hospital as this that a small special ward should always be available for the care and treatment of employees when seriously ill. Such a ward might be fitted up in one of the buildings already in existence without large expenditure. We would ask for this purpose the sum of \$1,000.

STERILIZER

It is highly important that there should be in addition to the existing laundry equipment a steam sterilizer for taking care of clothing and bed linen from infected cases. In spite of extraordinary precautions typhoid fever, erysipelas, scarlet fever and measles occasionally appear in our wards, and it is reasonably certain that lack of facilities for properly sterilizing the ward linen and the patients' clothing has much to do with prolonging epidemics. The cost of a good steam sterilizer installed in the laundry and connected with the steam heating apparatus would be about \$500.

RENEWAL OF WATER TANKS

The large water tanks in the attics of the main building from which the supply of water for general purposes is obtained throughout the wards and kitchens of this structure have been in use for many years and were never properly provided with vents for thorough and frequent cleansing. The outlet pipe is about four inches from the bottom of each tank, and this arrangement allows the accumulation of sediment difficult to remove and which soon becomes so foul as to afford a favorable nidus for the growth of micro-organisms. We suspect that these tanks may have played an important part in our recent epidemics of typhoid fever. The existing conditions should be remedied, and we are not certain but that entirely new tanks should be provided.

SINKS AND TILING IN THE MAIN BUILDING

In the south wing of the main building there are four dining-rooms, and connected with each of these there is a pantry. The floors of these pantries have become badly decayed in consequence of constant wetting during dish washing. The sinks in which the dishes are washed are too small, and being of earthenware their hardness contributes materially to the breakage of tableware. These sinks should be replaced by others of wood construction, and the floors should be of tile. To make these repairs would cost approximately \$2,000.

ADDITION TO THE SOUTH BUILDING KITCHEN

This kitchen is small and inconvenient. There has never been any provision for the preparation of vegetables preliminary to cooking or for a dining-room for employees. By building a comparatively small addition to the west end of the existing kitchen these defects would be overcome, and there would be available in the second story a dormitory for the accommodation of a half dozen additional patients. The cost of this construction would be approximately \$1,600.

CEMENTING CELLAR BOTTOMS

The cellar bottoms at the south and west buildings and at the three farm cottages have never been properly finished owing to lack of funds for the purpose. The soft earth, especially in the spring and fall, becomes damp and unwholesome. There should be cement floors throughout these cellars. The cost of such floors for all of these buildings would be approximately \$2,000.

ADDITIONAL FURNITURE

Throughout the institution the constant wear and tear of furniture causes depreciation and loss which should be met from time to time as it occurs. For this purpose there should be a special fund allotment for the coming year of at least \$3,000.

STAND PIPE

The existing reservoir into which water is daily pumped and from which water is drawn for general hospital purposes leaks badly owing to its defective construction. There is therefore constantly large loss to the hospital because of this leakage, and the expense involved is necessarily considerable. We believe that a stand pipe somewhere in the vicinity of the present reservoir would remedy the existing difficulty and would prove an economical investment. The approximate cost of the required stand pipe would be \$3,000.

PAINTING

The great number of buildings now belonging to the hospital plant are in need of repairs from year to year. Painting is especially necessary as a protection against the elements. Provision therefore should be made for work of this kind to the amount of \$1,000.

FINISHING THE BASEMENT IN THE NURSES' HOME

When the nurses' home known as Woodlawn cottage was erected a large basement under the rear wing was left unfinished owing to lack of funds. This room is well lighted, and if properly floored and the side walls finished would afford valuable space for sundry hospital purposes. The cost would be approximately \$400.

FINISHING THE ATTIC OF THE MANUFACTURING BUILDING

A small amount of money would enable us to finish the third floor or attic story in the new manufacturing building, which would give us valuable space for a variety of purposes. We need only the material necessary for the flooring, siding and ceiling. The cost would be approximately \$400. The space obtained would give us besides additional workshop accommodations, storage rooms for blankets which are not required on

the wards during the summer months, also storage for quantities of winter clothing belonging to patients. Other supplies that it is desirable to keep on hand might also be stored here.

NEW MACHINERY FOR SHOPS

In the machine shop a pipe-cutting machine capable of cutting all sizes of pipe up to ten inches in diameter should be added to our equipment. This would save both time and expense in making repairs to our extensive steam line. Such a machine would cost \$400.

In the carpenter shop there should be provided a resawing machine, which would cost \$150. This machine would enable us to saw planks through edgewise and thus save much material which is now lost because of the necessity of planing thick boards down to required dimensions.

There should be installed two electric motors in place of the old dilapidated engine which now furnishes power to run the machinery in the carpenter's shop. One of these motors should be placed on the lower floor for driving the planer and the circular saws, while the other, of ten horse-power, should be placed on one of the floors above to run the smaller machine. With this installation we are confident that large saving in the consumption of steam would result, and consequently there would be material saving in the operation of the wood-working machinery. The cost would be approximately \$650.

FIRE PROTECTION

Renewals of hose, fire extinguishers, hand grenades, etc., should be provided for to some extent. The old apparatus has long been in use and needs a thorough overhauling and some additions. We should have for this purpose the sum of \$300.

LIBRARY BOOKS AND APPLIANCES

The hospital is but poorly equipped as regards library books and appliances. Much could be done for the benefit of the patients with a moderate expenditure in this direction. Be-

sides books for general reading, additional facilities for instruction in the training school are desirable. For this purpose we need the sum of \$500.

CEMENT WALKS

There are many pathways about the hospital grounds where the board walks which formerly existed have decayed until it has become necessary to remove them. In these places cement walks should be laid. This material is now comparatively inexpensive, so that good and permanent walks may be made from it for comparatively small cost. There should be provided for this purpose \$600.

FARM RENEWALS

The old pig pen has been in use many years and has twice in recent times been invaded by swine disease, which has thoroughly infected it. We believe a new pen removed from the site of the old one should be erected. The approximate cost of a building for this purpose would be \$3,500.

The proper and economical operation of the farm requires many new tools and appliances such as wagons, plows, harrows, etc., to the value of about \$400.

There is greatly needed at the Barlow farm an open shed for the protection of wagons and farm machinery, tools, etc. The cost of such a shed would be \$300.

The old ice house at the Barlow farm was formerly a woodshed, which was remodeled fourteen years ago and converted into an ice house. The timbers, siding and roof have decayed to such an extent that they are beyond repair. A new structure which would answer our purpose could be erected for \$500.

There should also be erected a considerable amount of new fencing in place of old broken down fences that are not only so dilapidated as to reflect discredit on the hospital management, but no longer afford protection to fields of growing crops. We need for this purpose \$600.

RECAPITULATION.

Hospital building for acute cases.....	\$50,000
Sun room for hospital wards.....	2,600
Ventilation of buildings	3,000
Steel ceilings	1,000
Extra diet kitchen	300
Isolation ward	1,000
Hospital accommodations for employees.....	1,000
Sterilizer	500
Renewal of water tanks.....	.....
Sinks and tiling in main building.....	2,000
Addition to south building kitchen.....	1,600
Cementing cellar bottoms	2,000
Additional furniture	3,000
Stand pipe	3,000
Painting	1,000
Finishing basement in nurses home.....	400
Finishing attic of manufacturing building.....	400
New machinery for shops.....	1,200
Fire protection	300
Library books and appliances.....	500
Cement walks	600
Farm renewals	5,300

ACKNOWLEDGMENTS

On behalf of our patients who have been remembered in substantial form by many friends who, although not related to them, have been good enough to make contributions at different times during the year, notably on Field Day and at Christmas, we would make heartfelt acknowledgment. We are especially grateful to the following:

Dr. H. O. Ely, Rev. Dr. McVey, Dr. Leroy D. Farnham, Rev. Dr. Taylor, Elk Drug Co., Ford, Beach & Powell, McTighe, Truesdell & Davidge, E. M. Hanrahan, Gillette & Seeley, Corner Hat Store, National Biscuit Co., W. P. Guilfoyle, Smith & Bump,

Sisson Bros. & Welden Co., Mrs. Horace Lester, Mrs. N. W. Waldron, Mrs. Anna C. Dregg, Mrs. M. W. Scott, Nelson & Son, George W. Lester, Mrs. C. C. Eastman, Mrs. John Anderson, Mrs. C. W. Middlebrook, Miss W. A. Goff, Mrs. E. E. Ensign, Mrs. A. Osier, Gerry Jones, Edward J. Patterson, John Heffern, Dobson Club, C. A. Weed & Co., Callahan & Douglas, C. D. Middlebrook & Son, Street Railroad Co., Hirschman Bros., C. S. Darling, Binghamton Leader, Evening Herald, Star-Chronicle, Binghamton Republican, Binghamton Whist Club, Jerome De Witt, Geo. C. Bayless, Boss & Jones, Charles W. Bacon, Home for Aged Women, H. A. Nichols, George Q. Moon & Co., Ogden Brick Co., Truitt Bros., Hills, McLean & Haskin, Stephens & Co., J. M. Henwood & Co., Dr. Spencer, W. A. Harding.

NEWSPAPERS.

Many newspapers have been received during the year from the publishers gratuitously. These papers, coming from the homes of our patients, have proved interesting and have given them much comfort. On their behalf we would express our thanks and beg the continuance of these generous favors. The following papers have been received regularly throughout the year:

Albany Argus, daily.

Bainbridge Express, weekly.

Brookfield Courier, weekly.

Canastota Journal, weekly.

Catholic Champion, monthly.

Catskill Examiner, weekly.

Cazenovia Republican, weekly.

Cobleskill Times, weekly.

Columbia Republican, weekly.

Delaware Republican, weekly.

Deposit Journal, weekly.

Elmira Telegram, weekly.

Essex County Republican, weekly.

Fishkill Standard, weekly.

Freeman's Journal, weekly.
Long Island Star, weekly.
Mohawk Valley Register, weekly.
Oneonta Herald, weekly.
Otsego Democrat, weekly.
Otsego Republican, weekly.
Rome Citizen, semi-weekly.
Ticonderoga Sentinel, weekly.
Tioga County Herald, weekly.
Troy Northern Budget, weekly.
Walton Chronicle, weekly.
Watervliet Journal and Democrat, weekly.

RELIGIOUS SERVICES

Religious services, both Protestant and Roman Catholic, have been held regularly in our assembly hall and have been largely attended by both patients and employees. The practice of inviting the pastors of the city churches in rotation has been continued.

ENTERTAINMENTS

As regards amusements and diversions provided for our patients, the following list of entertainments will give some idea of the scope and extent of this factor in the general scheme of treatment. The weekly dances during the fall, winter and spring months have been thoroughly enjoyed, and the Yule-tide festivities Christmas eve, when nearly every patient in the hospital receives gifts from home, is a joyous occasion looked forward to for many weeks and long remembered after its occurrence. The more prominent entertainments of the year were the following:

October 18th—Magician.

November 2d—Darrows Magic and Shadowgraph; 8th, Shanahan & Heath's Minstrels; 12th, Aunt Samantha's Album (Mrs. Gilson).

December 3d—Prof. Turner, illustrated lecture; 7th, Shanahan & Heath's Minstrels; 17th, Hendrickson, Magic and

Shadowgraph; 20th, Prof. Stanley, illustrated lecture on birds; 24th, Christmas tree entertainment.

February 11th—Prof. Gibbs, illustrated lecture on America; 18th, Prof. McCollum, blind humorist.

March 14th—Prof. Hurd, magician.

April 9th—Bistolphi's musicians; 11th, Shannahan Comedy Co., "Finnegan's Alley;" 12th, Shannahan Comedy Co., "Finnegan's Alley;" 15th, Prof. Phelps, illustrated lecture, New England Customs; 24th, High School Co., "The Rose and Ring;" 28th, High School Co., "The Rose and Ring."

May 3d—Mary C. Holmes, readings; 15th, Mr. and Mrs. Linsley, Shakesperean readings.

July 5th—Band concert and fireworks.

September 11th—Annual Field Day.

Besides these entertainments at the hospital many patients attended performances in the opera house in the city. Special effort is always made to provide entertainment out of doors during the summer. On Tuesday and Friday evenings of each week through July and August from seven until nine o'clock the hospital band gives a concert on the lawn, and these concerts are attended by more than half of the insane population of the institution. At least three hundred patients attended the county fair, Buffalo Bill's Wild West, Wallace Bros.' circus and other shows of a like nature. The hospital ball team has played match games at the hospital on Saturday afternoons, and many of the male patients attended the games played in the city by teams representing the State league. Trolley rides occur from time to time, and on these occasions several hundred patients are taken over the entire street railroad system of the city. And then, too, it is not unusual for a number of patients with an attendant to leave the hospital early in the morning and ride to one of the summer resorts on the outskirts of the city and spend the remainder of the day picnicking out of doors, returning to the hospital early in the evening.

THE GOVERNOR'S VISIT

On the 30th of July, 1901, Governor Odell, with Senator Higgins, chairman of the finance committee, and Senator Ellsworth, Speaker Nixon and Assemblyman Allds, visited the hospital and spent considerable time inspecting our accommodations for patients, our shops and mechanical departments and the hospital premises generally. The visitors made many inquiries as to the details of management, and were especially desirous of ascertaining the cost of construction and the necessary expenses of operating the hospital plant for the maintenance of patients. Every facility was afforded them for the accomplishment of their desires, and I believe they left the institution with favorable opinions as to the methods pursued in the conduct of its affairs.

STATE COMMISSION IN LUNACY

The Commissioners in Lunacy have visited the hospital during the year and have personally inspected its several departments and the manner in which the work of each is conducted. They have given painstaking consideration to our estimates for maintenance and to many matters relating to repairs and betterments. The new president of the Commission, Dr. Frederick Peterson, visited the hospital July 6, 1901, and personally examined the patients that had been admitted during the fiscal year prior to his coming. To him and to his associate, Hon. William L. Parkhurst, I would express my thanks for advice and encouragement in the discharge of my many duties.

MEDICAL STAFF

In the medical staff there has been but one change during the year, viz.: the resignation of Dr. Cecil MacCoy, who severed his connection with the hospital April 30, 1901, to engage in private practice in Brooklyn. Dr. MacCoy had served this institution faithfully and well for a period of five years. His departure was a material loss to the service. Of the other officers who have worked with me for the highest ideal in hospital

management, and of the employees who have faithfully performed the duties assigned them, I have only words of praise. Without the aid they have given me in unstinted measure the excellent record of the year would not have been possible.

In conclusion, gentlemen, I would express my grateful appreciation and my lasting obligation to you for the encouragement and support you have given me in the discharge of duties never light and often exceedingly arduous.

Respectfully submitted.

CHARLES G. WAGNER

Superintendent

October 1, 1901

REPORT OF STEWARD

Apples, 462 bushels, at 50 cents.....	\$231 00
Asparagus, 2,560 bunches, at 10 cents.....	256 00
Barley, 40 bushels, at 60 cents.....	24 00
Beans, 431 bushels, at 48 cents.....	204 88
Beef, 6,706 pounds, at 6.5 cents.....	435 89
Beets, 646 bushels, at 30 cents.....	193 80
Buckwheat, 33 bushels, at 75 cents.....	24 75
Cabbage, 16,787 heads, at 3 cents.....	503 61
Carrots, 209 bushels, at 33 cents.....	68 97
Cauliflower, 147 heads, at 6 cents.....	8 82
Celery, 9,758 heads, at 3 cents.....	292 74
Cherries, 17 quarts, at 8 cents.....	1 26
Chicken, 1,155 pounds, at 12 cents.....	138 60
Corn, 24,669 ears, at 1 cent.....	246 69
Corn, 130 bushels, at 50 cents.....	65 00
Cucumbers, 44,752 quarts, at 1 cent.....	447 52
Currants, 1,006 quarts, at 9 cents.....	90 54
Duck, 5 pounds, at 12 cents.....	60
Eggs, 2,203 dozen, at 17 cents.....	374 51
Ensilage, 605 tons, at \$3.50	2,117 50
Hay, 86 tons, at \$8.90.....	765 40
Hides, 701 pounds, at 6.7 cents.....	46 94
Lamb, 812 pounds, at 12 cents.....	97 44
Lard, 2,560 pounds, at 10 cents.....	250 00
Leeks, 1,745 bunches, at 4 cents.....	69 80
Lettuce, 10,250 heads, at 4 cents.....	408 20
Melons, 254, at 7 cents.....	17 78
Milk, 294,754 quarts, at 2.75 cents.....	8,105 74
Mutton, 633 pounds, at 9 cents.....	56 97
Oats, 2,550 bushels, at 33 cents.....	841 50
Onions, 404 bushels, at 70 cents.....	282 80
Onions, 16,068 bunches, at 4 cents.....	642 72
Parsley, 2,815 bunches, at 1 cent.....	28 15
Parsnips, 181 bushels, at 32 cents.....	57 92
Peaches, 2 bushels, at \$1.50.....	3 00

Pears, 81 bushels, at 90 cents.....	\$72 90
Peas, 183 bushels, at 80 cents.....	146 40
Pelts, 33.....	12 00
Peppergrass, 180 bunches, at 5 cents.....	9 00
Peppers, 16 bushels, at \$1.10.....	17 60
Pickles, 35 barrels, at \$5.....	175 00
Plums, 4 bushels, at \$1.50.....	6 00
Pork, 10,442 pounds, at 7.25 cents.....	757 05
Potatoes, 3,362 bushels, at 45 cents.....	1,512 90
Radishes, 11,842 bunches, at 4 cents.....	473 68
Raspberries, 2,963 quarts, at 7 cents.....	207 41
Rhubarb, 11,270 bunches, at 5 cents.....	563 50
Rutabagas, 25 bushels, at 25 cents.....	6 25
Rye, 1,685 bushels, at 42 cents.....	707 70
Sage, 200 bunches, at 4 cents.....	8 00
Sausage, 504 pounds, at 10 cents.....	50 40
Skins, 8.....	5 05
Spinach, 97 bushels, at 80 cents.....	77 60
Squash, 1,132 pounds, at 2 cents.....	22 64
Straw (bedding), 89 tons, at \$5.50.....	489 50
Straw (feed), 33 tons, at \$5.50.....	181 50
Strawberries, 1,162 quarts, at 7 cents.....	81 34
Tallow, 1,050 pounds, at 3.5 cents.....	36 75
Tomatoes, 873 bushels, at 65 cents.....	567 45
Tomatoes, 677 pounds, at 2 cents.....	13 54
Turnips, 587 bushels, at 32 cents.....	187 84
Vegetable oysters, 106 bushels, at 55 cents.....	58 30
Wool, 572 pounds, at 18 cents.....	102 96

Total value	\$24,007 30
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FARM STOCK ON HAND SEPTEMBER 30, 1901

Boars.....	2
Bulls.....	5
Calves.....	29
Colts.....	2
Cows.....	109
Ducks.....	45
Heifers.....	24
Hens.....	600
Horses.....	35
Mule.....	1
Pigs.....	106
Sheep.....	37
Sows, breeding	30

MATRON'S REPORT

Aprons, canvas	3
Aprons, gingham	29
Aprons, ticking	185
Aprons, white	1,137
Baby dresses	4
Baby skirts	2
Bags, canvas, laundry.....	17
Bags, ticking	14
Bandages.....	5,886
Bath robes, outing flannel.....	6
Bed bats	9
Bibs, ticking	30
Blankets, hemmed	752
Broom bags	64
Burial robes	60
Caps, nurses'	1,074
Chemise, bleached	71
Chemise, unbleached	300
Combination suits, cotton flannel, strong.....	13
Combination suits, muslin	4
Combination suits, ticking, double, strong.....	10
Comfortables, silkoline	4
Curtains, canvas	17
Curtains, mull	72
Curtains, muslin	8
Covers, machine	2
Covers, bread	2
Drawers, bleached	86
Drawers, unbleached	274
Dresses, cheviot	408
Dresses, cheviot, strong	41
Dresses, gingham	182
Dresses, outing flannel	10
Dresses, percale	166
Dresses, ticking, double, strong	6
Dresses, repaired, strong.....	59

Dresses, worsted	29
Dresses, rubber	6
Dresser covers	126
Mattress ticks	227
Napkins, hemmed	170
Neckties.	242
Nightdresses, bleached	197
Nightdresses, unbleached	34
Oil strainers	21
Operating aprons	30
Pillowcases.	2,551
Pillowticks	46
Screens, filled	7
Shades, hemmed	470
Sheets, bleached, double	15 -
Sheets, bleached, single	68
Sheets, unbleached, single	2,090
Shirts, cheviot	537
Shirts, fine	120
Shirts, hospital	180
Skirts, cheviot	178
Skirts, cotton flannel	67
Skirts, gingham	120
Skirts, muslin	10
Skirts, worsted	6
Sofa pillows, covered	44
Suspenders, ticking	474
Tablecloths, red	39
Tablecloths, white	251
Teabags.	68
Towels, dish	648
Towels, hand	3,234
Towels, roller	415
Underwaists.	28
Waists, percale	20
Waists, worsted	9
Wrappers, cotton flannel	84

MENDING ROOM

Aprons, canvas	10
Aprons, ticking	58
Bags, laundry	7
Bedspreads.....	20
Blankets.....	526
Blouses.....	69
Coats.....	2,048
Drawers.....	4,433
Flags.....	4
Overalls	847
Overcoats.....	88
Rugs.....	20
Shirts, cheviot	4,212
Shirts, fine	3,945
Shirts, night	2,411
Shirts, under	4,421
Socks.....	4,953
Strong suits	434
Tablecloths.....	65
Trousers.....	3,838
Vests.....	982

TAILOR'S REPORT

Caps.....	163
Cassock.....	1
Coats, duck	4
Coats, denim	6
Coats, cassimere	269
Coats, cottonade	43
Coats, linen	41
Overalls.....	137
Overcoats.....	44
Pea jackets	19
Suits, painters'.....	12
Suits, base ball.....	9

Trousers, cassimere	494
Trousers, cottonade	116
Trousers, denim	33
Vests, cassimere	314
Vests, cottonade	13

UPHOLSTERER'S REPORT

Awnings	3
Awnings, repaired	2
Baseball bases	3
Baskets, waste paper	4
Beds, castors put on	106
Beds, repaired	58
Bed, folding, repaired	1
Bed sofa, repaired	1
Bed stubs put on	211
Boring machine, repaired	1
Box, upholstered	1
Brooms	928
Brooms, extra heavy	137
Brooms, whisk	86
Broom winder, repaired	1
Brushes, bath	62
Brushes, floor	51
Brushes, floor, handles put in	12
Brushes, floor, repaired	42
Brushes, hair	30
Brush, horse	1
Brushes, scrubbing	281
Brushes, stable	10
Buggy (two-seat), upholstered	1
Carpets, cut	2
Chairs, caned	131
Chairs, cushions	2
Chair, barber, repaired	1
Chairs, barber, upholstered	2

Chairs, castors put on	4
Chairs, leather seats put in.....	32
Chairs, repaired	131
Chairs, perforated seats put in	29
Chairs, upholstered	22
Couches, castors put on	5
Couch, frame made	1
Couches, recovered	5
Couches, repaired	7
Couches, upholstered	4
Crutches, rubber stubs put on	4
Crutches, upholstered	2
Cushions, repaired	3
Desk, repaired	1
Desk, top covered	1
Door-mats, common	76
Door-mats, large	2
Foot-rests, upholstered	2
Foot-stool, upholstered	1
Hampers, clothes	3
Mattress, cotton, single	1
Mattress, cotton, repaired	1
Mattresses, hair, double, repaired	8
Mattresses, hair, single, repaired	249
Mattresses, single	65
Mattress tufts, made	18,432
Mattresses, wire, double, stretched	2
Mattresses, wire, single, stretched	61
Mattress, table, repaired	1
Mattress covers, made	2
Piano stool, upholstered	1
Pillows, hair	46
Pillows, hair, repaired	59
Settees, repaired	11
Settees, recovered	5
Settees, rubber stubs put on	33

Settees, upholstered	9
Table top, covered	1
Table, repaired	1
Tables, rubber stubs put on	2
Shafts, carriage, trimmed	2
Wagon cushions	4
Wagon tops, covered	2
Wardrobe, castors put on	7

SHOEMAKER'S REPORT

Bags, horse	2
Baseball mitts, repaired	2
Baseballs, repaired	7
Belts for barn motor, repaired	4
Blinders, horse	4
Boots, horse (pairs)	4
Boots, men's (pairs)	121
Boots and shoes, repaired (pairs)	1,381
Breast collar and traces	1
Bridles, horse (pairs)	2
Collars, horse (pairs)	2
Collar, horse, pads	2
Covering coach wings (pair)	1
Covering set hames (pair)	1
Harness, pieces, new	267
Harness, pieces, repaired	218
Lines, new (pairs)	7
Mittens, men's (pairs)	462
Muzzles, horse	2
Shoes, men's (pairs)	460
Shoes, women's (pairs)	361
Sleeves, for hose	12
Slippers, men's (pairs)	351
Traces, new (pairs)	6
Truss, repaired	2

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900	641	735	1,376
Admitted during year ending Sept. 30, 1901:			
On original commitments:			
From residences	114	96	210
By transfers from county houses	5	4	9
By transfers from other institutions for insane.	5	2	7
Total number under treatment during year.	765	837	1,602
Daily average population	649.9	726.1	1,376
Capacity of institution	605	697	1,302
Discharged during the year:			
As recovered	28	46	74
As improved	21	15	36
As unimproved	14	10	24
As not insane	2	2	4
Died	57	57	114
Whole number discharged during the year.....	122	130	252
Remaining October 1, 1901 ¹	643	707	1,350

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening.....	October 19, 1881
Total acreage of grounds and buildings	1,060
Value of real estate, including buildings	\$960,000 00
Value of personal property.....	170,000 00
Acreage under cultivation	630

Receipts during year, maintenance fund:

Balance on hand October 1, 1900	\$9,412 77
From State Treasury for maintenance on estimates 1 to 12 inclusive	233,451 57
From private patients	3,175 08
From reimbursing patients.....	7,320 23
From manufacturing fund.....	1,940 58
From all other sources	1,248 74

Total receipts for maintenance..... \$256,548 97

Total receipts from State Commission in Lunacy for extraordinary improvements	\$21,450 29
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Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries.....	\$16,545 24
Estimate No. 2. For wages.....	87,047 36
Estimate No. 3. For provisions and stores.....	69,392 68
Estimate No. 4. For ordinary repairs.....	5,492 75
Estimate No. 5. For farm and grounds	6,592 17
Estimate No. 6. For clothing.....	10,761 81
Estimate No. 7. For furniture and bedding.....	6,254 18
Estimate No. 8. For books and stationery.....	1,750 42
Estimate No. 9. For fuel and light....	25,467 37
Estimate No. 10. For medical supplies.....	1,951 38
Estimate No. 11. For miscellaneous expenses	7,246 71
Estimate No. 12. For transportation.....	2,559 34

Total disbursements, estimates 1 to 12 inclusive \$241,061 41

Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	\$21,450 29
Total disbursements during year, manufacturing fund.....	*\$1,940 58
Remitted to State Treasurer, sundry receipts, Chapter 580, Laws of 1899	\$10,900 09
Balances October 1, 1901:	
General maintenance fund.....	\$4,587 47
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive	\$3.369
Maximum rate of wages paid attendants:	
Men.....	\$45 00
Women.....	40 00
Minimum rate of wages paid attendants:	
Men.....	\$20 00
Women.....	14 00
Proportion of day attendants to average daily population.....	1 to 8.5
Proportion of night attendants to average daily population.....	1 to 51
Percentage of daily patient population engaged in some kind of useful occupation.....	44
Estimated value of farm and garden products during year....	\$24,007 30
Estimated value of articles made or manufactured by patients during year.....	17,636 00

* Transferred to maintenance.

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.)	12	12	24	3	5	8	....
Mental strain, worry and overwork (not included in above) ..	4	5	9	2	2	4	....
Religious excitement ..	1	.....	1	.....	.....	.....	....
Fright and nervous shock.....	3	3	6	2	.....	2	....
Physical:							
Intemperance.....	22	2	24	5	.....	5	2
Sexual excess.....	2	1	3	1	.....	1	....
Veneral diseases.....	2	.....	2	.....	.....	.....	1
Masturbation.....	6	2	8	2	.....	2	....
Sunstroke.....	4	2	6	1	.....	1	....
Accident or injury	2	.....	2	.....	.....	.....	....
Change of life ....	.....	3	3	.....	1	1	....
Epilepsy.....	3	.....	3	.....	.....	.....	....
Other convulsive disorders .....	.....	2	2	.....	1	1	....
Diseases of skull and brain.....	3	2	5	1	.....	1	....
Old age.....	5	3	8	1	2	3	1
Epidemic influenza....	1	2	3	1	2	3	....
Abuse of drugs	2	3	5	.....	.....	.....	....
Loss of special sense ..	1	.....	1	1	.....	1	....
All other bodily disorders and ill health.	7	11	18	3	2	5	....
Heredity.....	10	9	19	10	9	19	....
Congenital defect.....	1	.....	1	.....	.....	.....	....
Unascertained.....	32	38	70	8	10	18	5
Not insane.....	1	2	3	.....	.....	.....	....
Total.....	124	102	226	41	34	75	9

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious.....				2		4
Mania, acute.....	56	27	3	404	189	41
Mania, recurrent ..	1	1		91	45	16
Mania, chronic.....	8	4	3	441	73	137
Melancholia, acute.....	72	40	9	471	234	47
Melancholia, simple.....				5	2	
Melancholia, chronic.....	3	1	6	350	52	95
Alternating (circular) in- sanity.....			2	12		4
Paranoia	9		1	30		1
General paralysis.....	13		9	130		122
Dementia, primary				54	11	19
Dementia, terminal.....	55		71	786		554
Epilepsy with insanity...	6		10	187	4	113
Imbecility with maniacal attacks.....		1		23	1	1
Idiocy				10		1
Not insane*	3			12		
Total	226	74	114	3,008	611	1,146

*Includes cases of alcoholism, drug habit, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	9	17	26	2	10	12	107	75	182	4	12	16
One to three months	9	9	18	11	10	21	72	65	137	84	48	132
Three to six months	4	6	10	7	8	15	44	41	85	114	92	206
Six to nine months .....	.....	2	2	3	6	9	16	15	31	41	39	80
Nine months to one year .....	.....	1	1	1	8	9	5	10	15	25	31	56
One year to eighteen months .....	.....	4	4	2	2	4	8	16	24	20	28	48
Eighteen months to two years .....	.....	.....	.....	2	1	3	3	4	7	6	11	17
Two to three years .....	.....	2	2	.....	1	1	14	13	27	9	16	25
Three to four years .....	.....	.....	.....	.....	.....	.....	9	5	14	5	3	8
Four to five years	1	.....	1	.....	.....	.....	6	6	12	4	4	8
Five to ten years .....	.....	2	2	.....	.....	.....	9	10	19	6	6	12
Ten to twenty years .....	.....	.....	.....	.....	.....	.....	1	4	5	2	1	3
Unascertained	5	3	8	.....	.....	.....	26	27	53	.....	.....	.....
Total	28	46	74	28	46	74	320	291	611	320	291	611

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases:						
Typhoid fever.....	4	.....	4	6	2	8
Influenza .....	.....	1	1	2	5	7
Diphtheria.....	.....	.....	.....	1	1	2
Erysipelas.....	3	3	6	6	5	11
Septicemia and pyemia.....	.....	1	1	1	2	3
Dysentery	1	.....	1	2	.....	2
Tuberculosis	9	8	17	73	100	173
Constitutional diseases:						
Rheumatism (or rheumatic affec- tions) .....	.....	.....	.....	1	1	2
Diabetes mellitus and diabetes insipidus .....	.....	.....	.....	1	1	2
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and œsophagus ..	.....	.....	.....	1	.....	1
Diseases of the stomach.....	1	1	2	3	7	10
Diseases of the intestines.....	3	2	5	25	33	58
Diseases of the liver .....	.....	.....	.....	8	2	10
Diseases of the peritoneum .....	.....	1	1	4	8	12
Diseases of the respiratory system:						
Diseases of the bronchi.....	2	.....	2	9	19	28
Diseases of the lungs	2	5	7	80	68	148
Diseases of the pleura.....	.....	.....	.....	1	2	3
Diseases of the circulatory system:						
Diseases of the heart.....	5	1	6	40	39	79
Arterio sclerosis.....	.....	.....	.....	1	.....	1
Aneurism.....	.....	1	1	.....	3	3
Diseases of the blood and ductless glands:						
Anemia, pernicious anemia and leukemia .....	.....	.....	.....	.....	1	1
Diseases of the genito-urinary system .....	.....	.....	.....	18	19	37
Diseases of the nervous system:						
Diseases of the meninges.....	.....	.....	.....	5	2	7
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions).....	2	3	5	15	30	45

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1898		
	Men	Women	Total	Men	Women	Total
Functional nervous diseases (paralysis agitans, chorea, eclampsia, hysteria, neuras- thenia).....	.....	1	1	.....	3	3
Epilepsy.....	4	3	7	45	28	73
Mental diseases:						
Exhaustion of acute mental disease.....	} 5	1	6	69	83	152
Exhaustion of chronic mental disease.....						
General paralysis of the insane.	4	5	9	92	20	112
The intoxications; heat-stroke; obesity:						
Alcoholism.....	.....	.....	.....	1	.....	1
Heat-stroke.....	.....	.....	.....	1	.....	1
Debility of old age.....	11	13	24	66	42	108
Accident.....	.....	.....	.....	2	3	5
Suicide.....	.....	.....	.....	1	3	4
Nephritis.....	1	4	5	2	8	10
Surgical and gynecological dis- eases and diseases of the skin..	.....	1	1	.....	1	1
Malignant new growths or cancer.	.....	2	2	6	18	24
Total	57	57	114	588	558	1,146

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during
the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888.		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	19	7	26	192	140	332
Maternal branch	13	8	21	169	187	356
Paternal and maternal branches	2	5	7	29	31	60
Collateral branches	14	11	25	111	136	247
No hereditary tendency ..	64	65	129	667	652	1,319
Unascertained	12	6	18	403	291	694
Total	124	102	226	1,571	1,437	3,008

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	47	26	73	718	499	1,217
Married	63	50	113	674	659	1,333
Widowed	8	25	33	130	257	387
Divorced	4	1	5	11	7	18
Unascertained	2	.....	2	38	15	53
Total	124	102	226	1,571	1,437	3,008

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	5	.....	5	39	11	50
Academic	6	3	9	69	79	148
Common school	95	88	183	1,073	995	2,068
Read and write	1	.....	1	24	33	57
Read only	3	.....	3	32	52	84
No education	4	3	7	104	75	179
Unascertained	10	8	18	230	192	422
Total	124	102	226	1,571	1,437	3,008

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901				SINCE OCTOBER 1, 1888							
	DURATION PREVIOUS TO ADMISSION			Total	DURATION PREVIOUS TO ADMISSION			Total				
	Men	Women	Total		Men	Women	Total					
Under one month	6	3	9	9	1	10	47	30	77	55	34	89
One to three months	7	4	11	5	5	10	48	42	90	53	40	93
Three to six months	5	4	9	4	7	11	38	28	66	56	26	82
Six to nine months	4	3	7	3	4	7	29	18	47	37	28	65
Nine months to one year .....	.....	2	2	2	3	5	14	14	28	23	23	46
One year to eighteen months ..	3	4	7	3	5	8	37	33	70	57	40	97
Eighteen months to two years ..	.....	.....	.....	2	1	3	16	5	21	35	20	55
Two to three years	3	8	11	2	2	4	54	57	111	71	50	121
Three to four years	3	4	7	3	1	4	46	27	73	46	37	83
Four to six years	8	6	14	6	9	15	48	40	88	41	83	124
Six to ten years	2	2	4	7	6	13	37	50	87	62	108	170
Ten to twenty years	5	6	11	11	13	24	38	44	82	52	69	121
Twenty years and over	2	1	3	.....	.....	.....	25	50	75	.....	.....	.....
Unascertained	9	10	19	.....	.....	.....	111	120	231	.....	.....	.....
Total	57	57	114	57	57	114	588	558	1,146	588	558	1,146
Average duration of insane life (giving years and tenths)				10.5	11.4	11.0	.....	.....	.....	8.5	11.5	10.0

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....		1	1	3	6	9
From 15 to 20 years.....	5		5	52	24	76
From 20 to 25 years.....	7	10	17	107	101	208
From 25 to 30 years.....	10	6	16	144	120	264
From 30 to 35 years.....	14	8	22	170	142	312
From 35 to 40 years.....	7	10	17	171	149	320
From 40 to 50 years.....	22	24	46	316	364	680
From 50 to 60 years.....	27	17	44	271	234	505
From 60 to 70 years.....	17	15	32	179	162	341
From 70 to 80 years.....	10	10	20	116	102	218
From 80 to 90 years.....	5	1	6	33	20	53
From 90 to 100 years.....				1	4	5
Unascertained				8	9	17
Total	124	102	226	1,571	1,437	3,008

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years.....	1	1	2	9	12	21
From 20 to 30 years.....	4	6	10	72	70	142
From 30 to 40 years.....	7	13	20	75	70	145
From 40 to 50 years.....	7	8	15	82	71	153
From 50 to 60 years.....	4	13	17	42	39	81
From 60 to 70 years.....	2	4	6	24	21	45
From 70 to 80 years.....	3	1	4	15	5	20
Unascertained				1	3	4
Total	28	46	74	320	291	611

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....				1		1
From 15 to 20 years.....		1	1	4	4	8
From 20 to 25 years.....		1	1	13	14	27
From 25 to 30 years.....	4	1	5	29	19	48
From 30 to 35 years.....	5	5	10	35	26	61
From 35 to 40 years.....	5	2	7	49	35	84
From 40 to 50 years.....	5	12	17	96	104	200
From 50 to 60 years.....	10	7	17	122	101	223
From 60 to 70 years.....	14	13	27	111	99	210
From 70 to 80 years.....	9	13	22	87	118	205
From 80 to 90 years....	5	1	6	35	25	60
From 90 to 100 years....					4	4
Unascertained.....		1	1	6	9	15
Total.....	57	57	114	588	558	1,146

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month.....	21	28	49
One to three months.....	25	16	41
Three to six months.....	18	7	25
Six to nine months.....	9	6	15
Nine months to one year.....	3	3	6
One year to eighteen months.....	8	10	18
Eighteen months to two years.....	1	4	5
Two to three years.....	8	5	13
Three to four years.....	3	4	7
Four to five years.....	4	2	6
Five to ten years.....	4	6	10
Ten to fifteen years.....	1	6	7
Twenty to thirty years.....	1	1	2
Unascertained.....	18	4	22
Total.....	124	102	226

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.....	9	9	18
One to three months.....	13	18	31
Three to six months.....	26	10	36
Six to nine months.....	17	11	28
Nine months to one year.....	10	9	19
One year to eighteen months.....	53	30	83
Eighteen months to two years.....	29	19	48
Two to three years.....	38	47	85
Three to four years.....	27	27	54
Four to five years.....	32	32	64
Five to ten years.....	190	249	439
Ten to fifteen years.....	95	122	217
Fifteen to twenty years.....	104	124	228
Total.....	643	707	1,350

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional :						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.	10	.....	10	67	4	71
Commercial :						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.	19	.....	19	154	2	156
Agricultural and pastoral :						
Farmers, gardeners, herdsmen, etc.	45	.....	45	465	.....	465
Mechanics at outdoor vocations :						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc.	11	.....	11	199	.....	199
Mechanics, etc., at sedentary vocations :						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.	9	.....	9	129	1	130
Domestic service :						
Waiters, cooks, servants, etc.	1	4	5	13	282	295
Educational and higher domestic duties :						
Governesses, teachers, students, housekeepers, nurses, etc.	1	80	81	14	867	881
Commercial :						
Shopkeepers, saleswomen, stenographers, typewriters, etc. ....	.....	.....	.....	.....	7	7

Table No. 17—(Concluded)

OCCUPATION.	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Employed in sedentary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, etc.....	1	7	8	3	90	93
Miners, seamen, etc.....				2		2
Laborers	15		15	371		371
No occupation	10	10	20	117	144	261
Unascertained	2	1	3	37	40	77
Total	124	102	226	1,571	1,437	3,008

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Armenia				1		1
Austria	1		1	3	1	4
Bohemia				1	1	2
Canada	1		1	11	6	17
China				1		1
Cuba				1		1
East Indies				1		1
Ecuador				1		1
England	6		6	25	14	39
France				2	3	5
Germany	2	1	3	58	41	99
Holland				2	1	3
Hungary				2	4	6
India				1		1
Ireland	4	8	12	162	172	334
Italy				2	1	3
Nova Scotia				1		1
Poland	1	1	2	5	4	9
Prussia				1		1
Roumania				1		1
Russia				1	6	7
Scotland	1	2	3	9	11	20
Spain				1		1
Sweden				2	2	4
Switzerland	1	2	3	2	8	10
United States	101	86	187	1,232	1,102	2,334
Wales				3		3
West Indies				1		1
Unascertained	6	2	8	38	60	98
Total	124	102	226	1,571	1,437	3,008

Of the total number admitted since the first of October, 1888, the parents of 22 per cent were both of foreign birth.

In 2.3 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 1.1 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany			
Allegany			
Broome	44		44
Cattaraugus			
Cayuga	1		1
Chautauqua			
Chemung	45	2	47
Chenango	15		15
Clinton			
Columbia			
Cortland	9		9
Delaware	22	1	23
Dutchess			
Erie			
Essex			
Franklin			
Fulton			
Genesee	1		1
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings			
Lewis			
Livingston			
Madison	16	1	17
Monroe			
Montgomery			
Nassau			
New York			
Niagara			
Oneida			
Onondaga			
Ontario			
Orange			
Orleans			
Oswego			
Otsego	39	1	40
Putnam			
Queens			
Rensselaer			
Richmond			
Rockland			
St Lawrence			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
Saratoga			
Schenectady			
Schoharie	12		12
Schuyler			
Seneca			
Steuben			
Suffolk			
Sullivan			
Tioga	16		16
Tompkins	1		1
Ulster			
Warren			
Washington			
Wayne			
Westchester			
Wyoming			
Yates			
Soldiers' Home			
Total	221	5	226

TABLE No. 20

Showing the residence by counties and classification of patients remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany	26	20	46			
Allegany	1		1			
Broome	108	100	208			
Cattaraugus						
Cayuga		2	2			
Chautauqua						
Chemung	55	51	106		1	1
Chenango	39	39	78	1	1	2
Clinton						
Columbia	1	4	5			
Cortland	31	35	66	1	1	2
Delaware	37	49	86	1		1
Dutchess	4	9	13			
Erie						
Essex						
Franklin						
Fulton	7	4	11			
Genesee						
Greene	7	19	26			
Hamilton						
Herkimer		1	1			
Jefferson						
Kings	63	2	65	1	1	2
Lewis						
Livingston						
Madison	34	28	62	1		1
Monroe		2	2			
Montgomery	8	4	12			
New York	3	84	87		2	2
Niagara						
Oneida						
Onondaga	11	1	12			
Ontario						
Orange	5	11	16			
Orleans						
Oswego						
Otsego	44	52	96			
Putnam		1	1			
Queens	5		5			
Rensselaer	36	24	50			

Table No. 20—(Concluded)

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Richmond	2	2	4	.....	.....	.....
Rockland	1	3	4	.....	.....	.....
St Lawrence .....	.....	.....	.....	.....	.....	.....
Saratoga	14	16	30	.....	.....	.....
Schenectady .....	.....	.....	.....	.....	.....	.....
Schoharie	23	31	54	.....	.....	.....
Schuyler .....	.....	1	1	.....	.....	.....
Seneca .....	.....	.....	.....	.....	.....	.....
Steuben	11	13	24	.....	.....	.....
Suffolk	5	8	13	.....	.....	.....
Sullivan	2	2	4	.....	.....	.....
Tioga	36	41	77	.....	1	1
Tompkins .....	.....	1	1	.....	.....	.....
Ulster	9	6	15	.....	.....	.....
Warren	5	3	8	.....	.....	.....
Washington	1	2	3	.....	.....	.....
Wayne .....	.....	.....	.....	.....	.....	.....
Westchester	8	27	35	.....	.....	.....
Wyoming .....	.....	.....	.....	.....	.....	.....
Yates .....	.....	.....	.....	.....	.....	.....
Unascertained	6	2	8	.....	.....	.....
Total	638	700	1,338	5	7	12

TABLE No. 21

Showing the movement of population since the opening of the hospital,
October 19, 1881

Total number of admissions.....	4,840
Total number discharged as recovered	714
Total number discharged as improved	560
Total number discharged as unimproved.....	648
Total number discharged as not insane.....	15
Total number died	1,553
Total number of discharges.....	3,490
Remaining October 1, 1901.....	1,350

TABLE No. 22

Showing suicidal and homicidal attempts and tendencies in cases
admitted during the year ending September 30, 1901

	Men	Women	Total
Attempted suicide.....	6	2	8
Threatened suicide	20	20	40
Attempted homicide.....	1	1	2
Threatened homicide.....	27	12	39
Attempted suicide and homicide.....	7	6	13
Total	61	41	102

TABLE No. 23

This table is submitted for the purpose of showing how large a proportion of the cases admitted during the past twelve years were virtually chronic cases when admitted.

YEAR	Whole number admitted	Found not insane.	Number insane one year and over	Percentage insane one year and over
1890	104	.....	73	70.19
1891	282	.....	181	64.18
1892	207	1	129	62.31
1893	235	.....	134	57.02
1894	192	2	84	43.75
1895	218	.....	82	37.61
1896	405	2	285	70.37
1897	241	.....	89	36.92
1898	211	.....	83	39.33
1899	258	3	95	33.33
1900	265	1	125	47.17
1901	226	3	86	38.73
Total	2,844	12	1,446	51.08

TABLE No. 24

Showing the percentage of recoveries on the average population and on the number admitted annually since 1881

YEAR	ON AVERAGE POPULATION			ON ADMISSIONS		
	Average population	Recovered	Percentage	Admitted	Recovered	Percentage
1882	156	4	2.56	298	4	1.34
1883	341	11	3.22	211	11	5.23
1884	502	15	2.98	243	15	6.17
1885	674	18	2.67	283	18	6.38
1886	852	17	1.99	319	17	5.32
1887	994	10	1.50	272	10	3.67
1888	1,053	28	2.65	206	28	13.59
1889	1,100	19	1.72	164	19	11.58
1890	1,096	17	1.55	104	17	16.34
1891	1,136	34	2.99	282	34	12.05
1892	1,143	26	2.27	207	26	12.62
1893	1,258	32	2.54	235	32	13.61
1894	1,244	27	2.17	192	27	14.06
1895	1,222	61	4.99	218	61	27.98
1896	1,249	54	4.32	405	54	13.33
1897	1,325	67	5.05	241	67	27.80
1898	1,339	66	4.92	211	66	31.28
1899	1,341	60	4.47	258	60	23.25
1900	1,353.5	74	5.46	265	74	27.92
1901	1,376	74	5.37	226	74	32.74

TABLE No. 25

Showing the percentage of deaths on the whole number treated and on the average population for twenty years

YEAR	Deaths	Whole number treated	Percentage	Average population	Percentage
1882.....	14	298	4.69	156	8.96
1883.....	40	486	8.23	341	11.73
1884.....	47	668	7.03	502	9.36
1885.....	58	863	6.72	674	8.60
1886.....	80	1,086	7.36	852	9.38
1887.....	87	1,208	7.20	994	8.75
1888.....	81	1,245	6.50	1,053	7.69
1889.....	69	1,241	5.56	1,100	6.27
1890.....	55	1,212	4.53	1,096	5.01
1891.....	77	1,389	5.54	1,136	6.77
1892.....	87	1,364	6.37	1,143	7.61
1893.....	80	1,431	5.59	1,258	6.35
1894.....	84	1,463	5.74	1,244	6.75
1895.....	82	1,437	5.70	1,222	6.71
1896.....	86	1,631	5.27	1,249	6.88
1897.....	86	1,538	5.59	1,325	6.49
1898.....	103	1,547	6.65	1,339	7.69
1899.....	117	1,596	7.33	1,341	8.72
1900.....	106	1,607	6.58	1,353.5	7.90
1901.....	114	1,602	7.11	1,376	8.28

TABLE No. 26

Showing the number of cases of general paresis admitted since 1881

YEAR	ADMITTED			DIED		
	Men	Women	Total	Men	Women	Total
1882	3	.....	3	.....	.....	.....
1883	6	.....	6	4	.....	4
1884	13	.....	13	4	.....	4
1885	25	.....	25	10	.....	10
1886	23	.....	23	9	.....	9
1887	19	1	20	12	1	13
1888	10	1	11	14	.....	14
1889	10	4	14	7	.....	7
1890	4	.....	4	3	.....	3
1891	7	2	9	4	1	5
1892	5	.....	5	7	1	8
1893	2	.....	2	4	2	6
1894	2	.....	2	4	.....	4
1895	1	2	3	3	1	4
1896	13	3	16	8	2	10
1897	10	.....	10	12	3	15
1898	10	5	15	18	3	21
1899	15	4	19	10	.....	10
1900	14	3	17	9	4	13
1901	13	.....	13	4	5	9
Total	180	16	196	118	20	138

TABLE No. 27

General table showing the operations of the Binghamton State Hospital
for the twenty years ending September 30, 1901

YEAR	Number admitted	Number discharged	Number treated	Discharged recovered	Discharged improved	Discharged unimproved	Discharged not insane	Died
1882.....	298	9	298	4	3	2	....	14
1883.....	211	21	486	11	4	5	1	40
1884.....	243	41	668	15	16	10	....	17
1885.....	283	38	863	18	14	5	1	58
1886.....	319	70	1,086	17	43	10	....	80
1887.....	272	82	1,208	10	47	25	....	87
1888.....	207	87	1,245	28	36	23	....	81
1889.....	164	64	1,241	19	5	40	....	69
1890.....	104	50	1,212	17	2	31	....	55
1891.....	282	155	1,389	34	22	99	....	77
1892.....	207	81	1,364	26	28	26	1	87
1893.....	235	80	1,431	32	36	12	....	80
1894.....	192	160	1,463	27	46	85	2	84
1895.....	218	211	1,437	61	42	26	....	82
1896.....	405	334	1,631	54	31	161	2	86
1897.....	241	202	1,538	67	29	20	....	86
1898.....	211	209	1,547	66	29	11	....	103
1899.....	258	254	1,596	60	52	22	3	117
1900.....	265	231	1,607	74	39	11	1	106
1901.....	226	252	1,602	74	36	24	4	114

FIFTEENTH ANNUAL REPORT
OF THE
MANAGERS
OF THE
ST. LAWRENCE STATE HOSPITAL
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

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G. C. MADILL, M. D., Ogdensburg.....	Surgeon
W. N. BELL, M. D., Ogdensburg.....	Ophthalmologist
H. B. BUTLER, D. D. S., Ogdensburg.....	Dentist

FIFTEENTH ANNUAL REPORT OF THE MANAGERS OF THE
ST. LAWRENCE STATE HOSPITAL

STATE OF NEW YORK

OFFICE OF THE MANAGERS ST. LAWRENCE STATE HOSPITAL

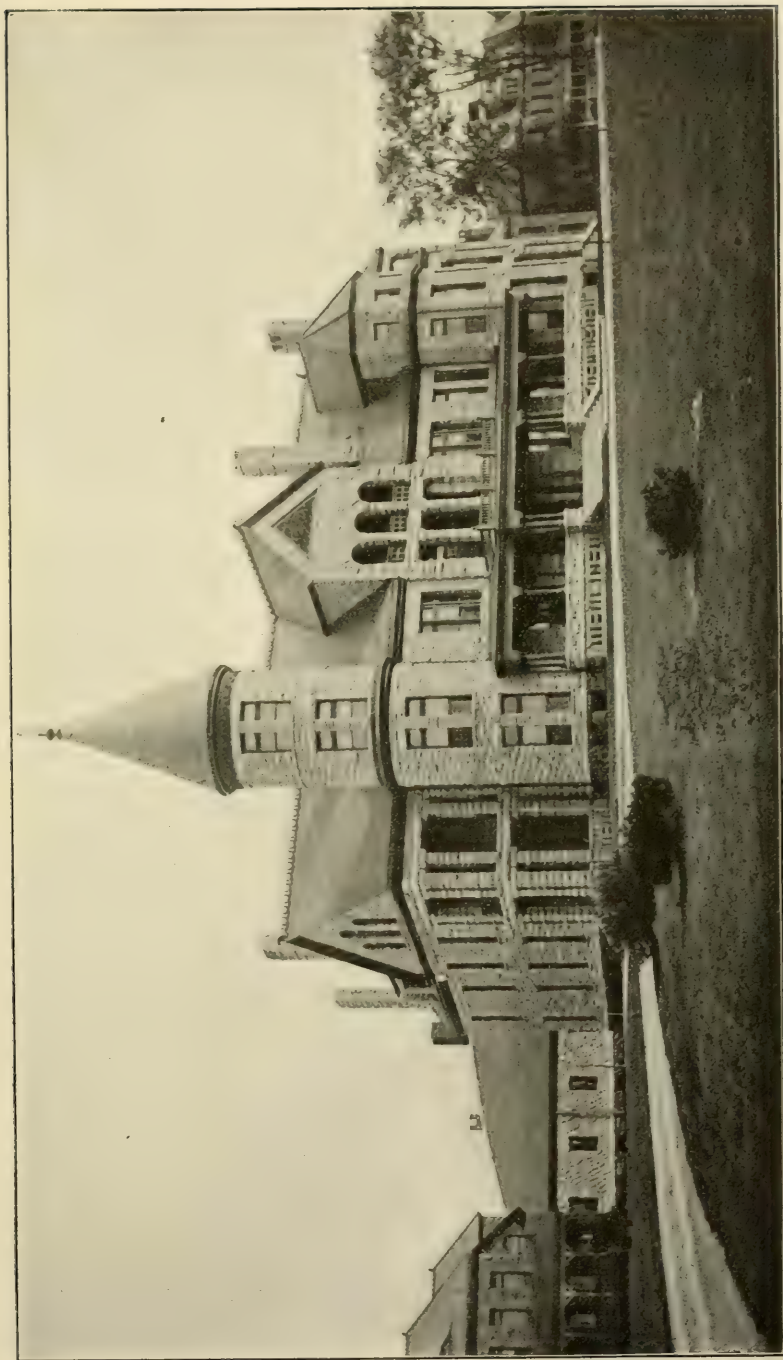
OGDENSBURG, *December 2, 1901*

To the State Commission in Lunacy

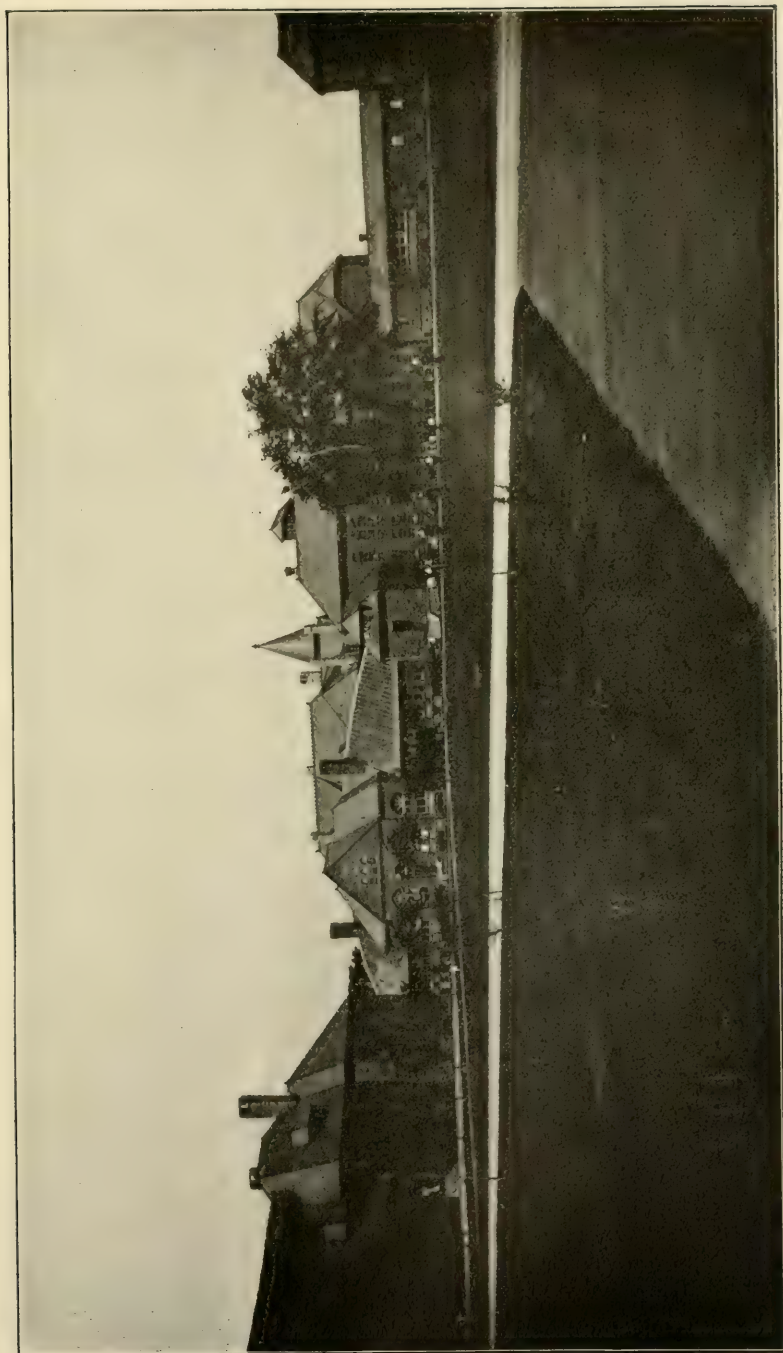
Gentlemen—I have the honor to transmit herewith the
fifteenth annual report of the managers of the St. Lawrence
State Hospital for the year ending September 30. 1901.

Very respectfully

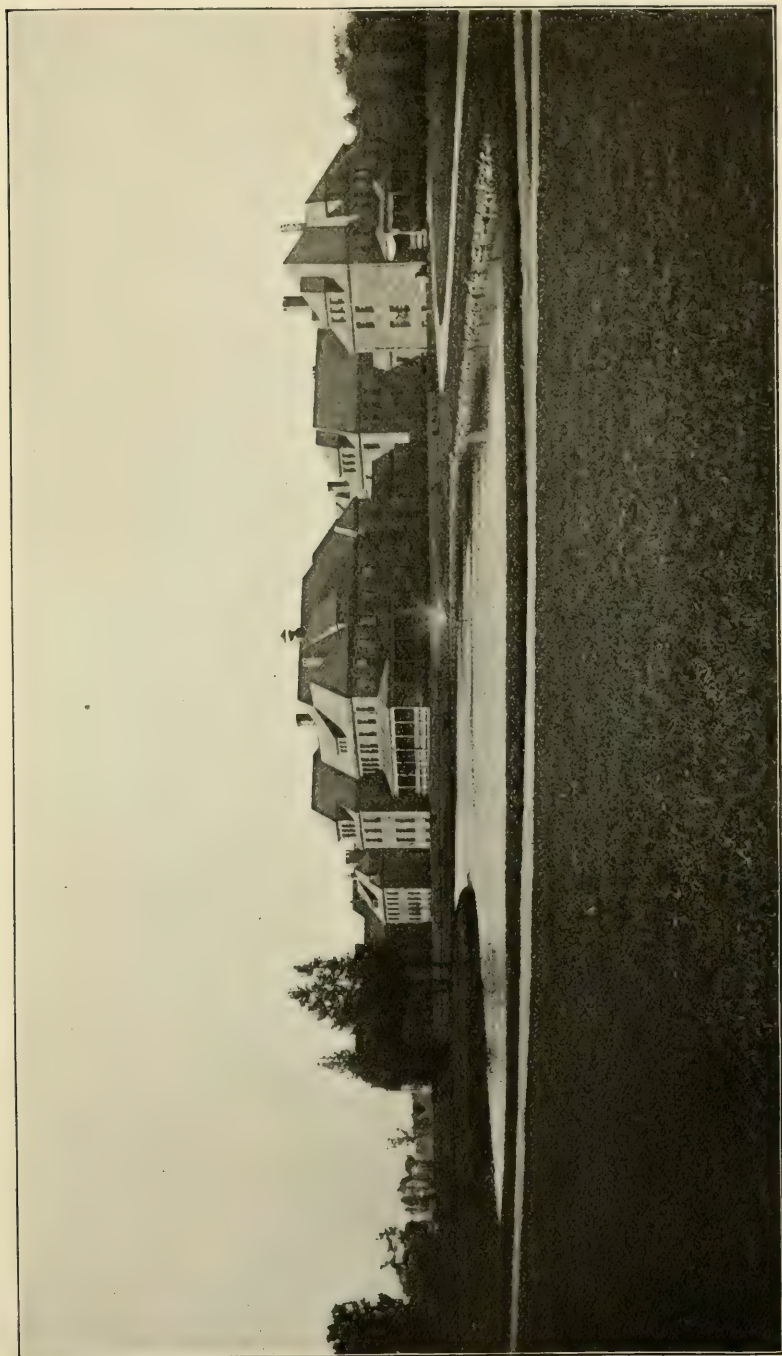
W. H. DANIELS



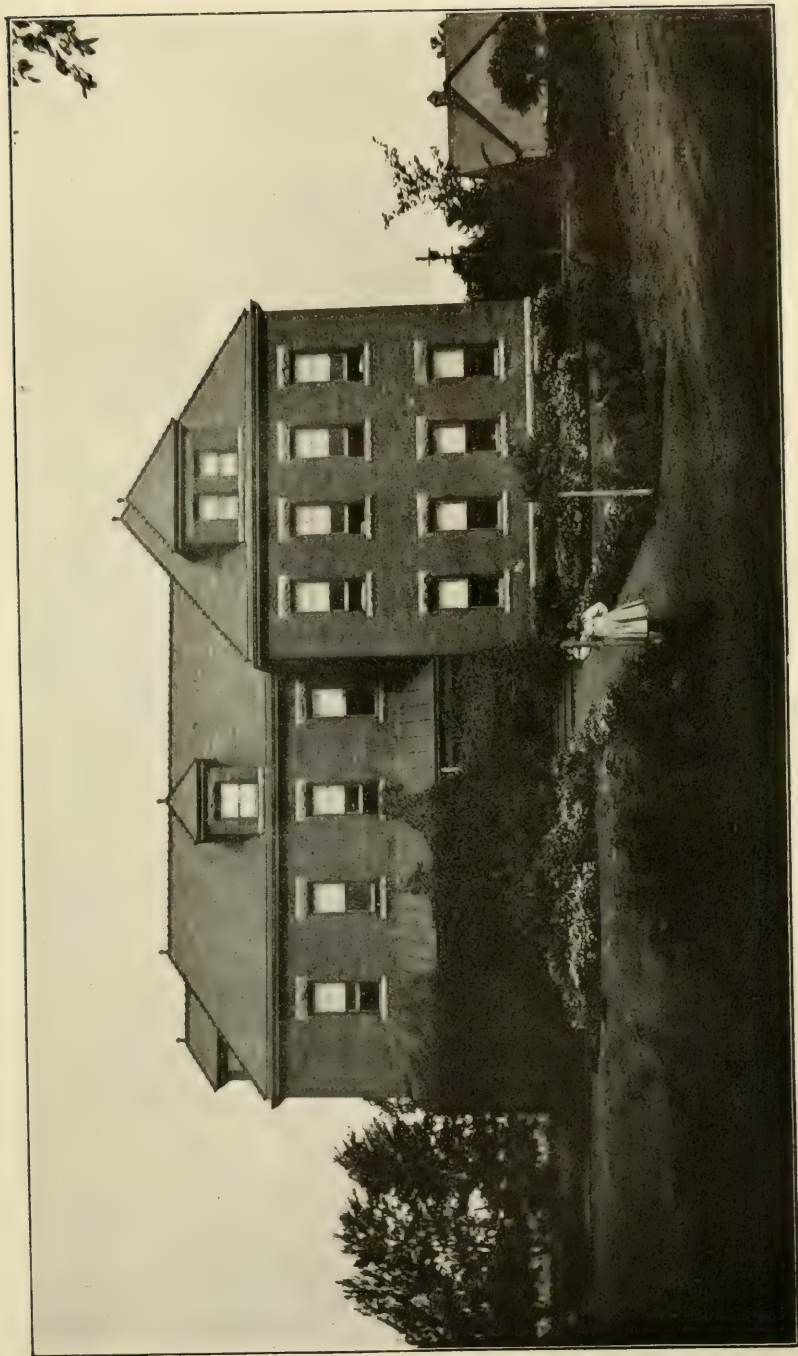
ST. LAWRENCE STATE HOSPITAL.—ADMINISTRATION BUILDING.



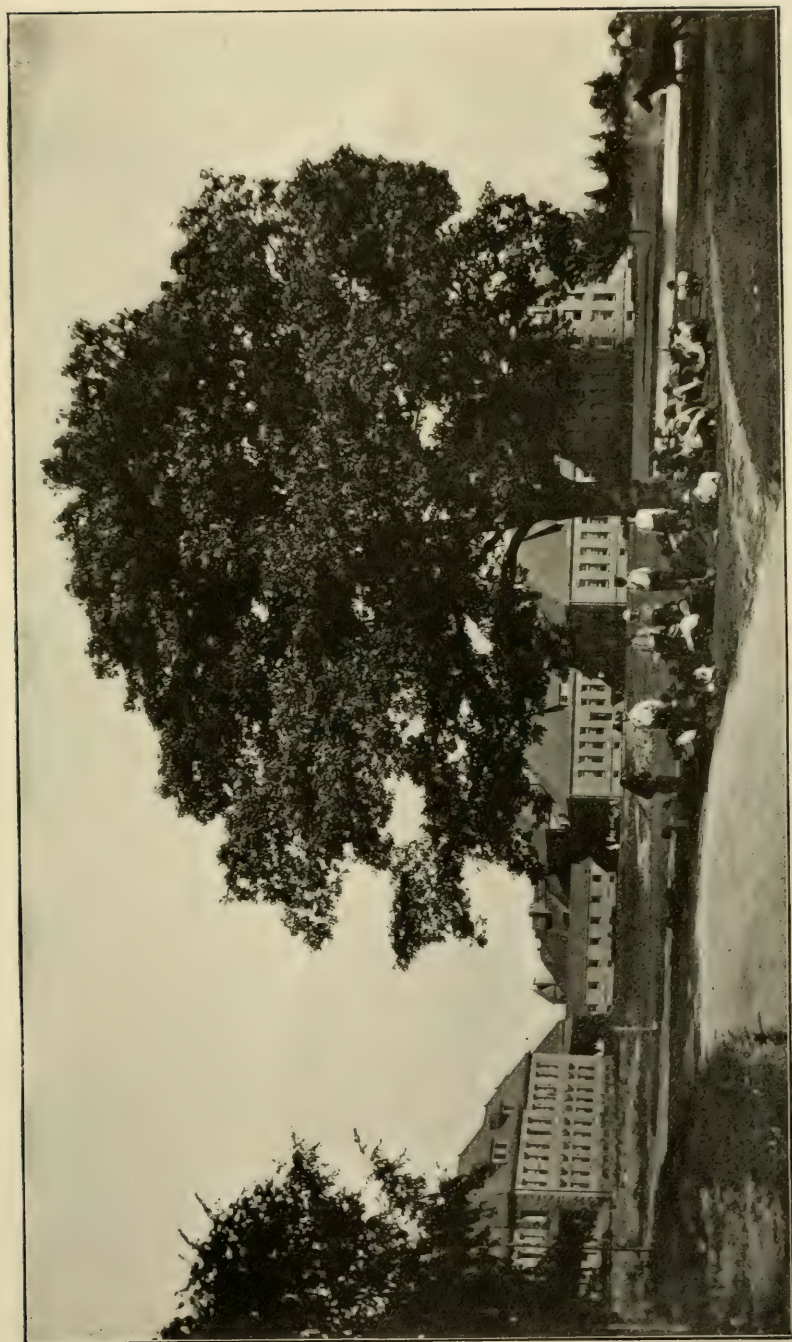
ST. LAWRENCE STATE HOSPITAL.—REAR OF CENTRAL HOSPITAL GROUP. SHOWING SUN ROOMS.



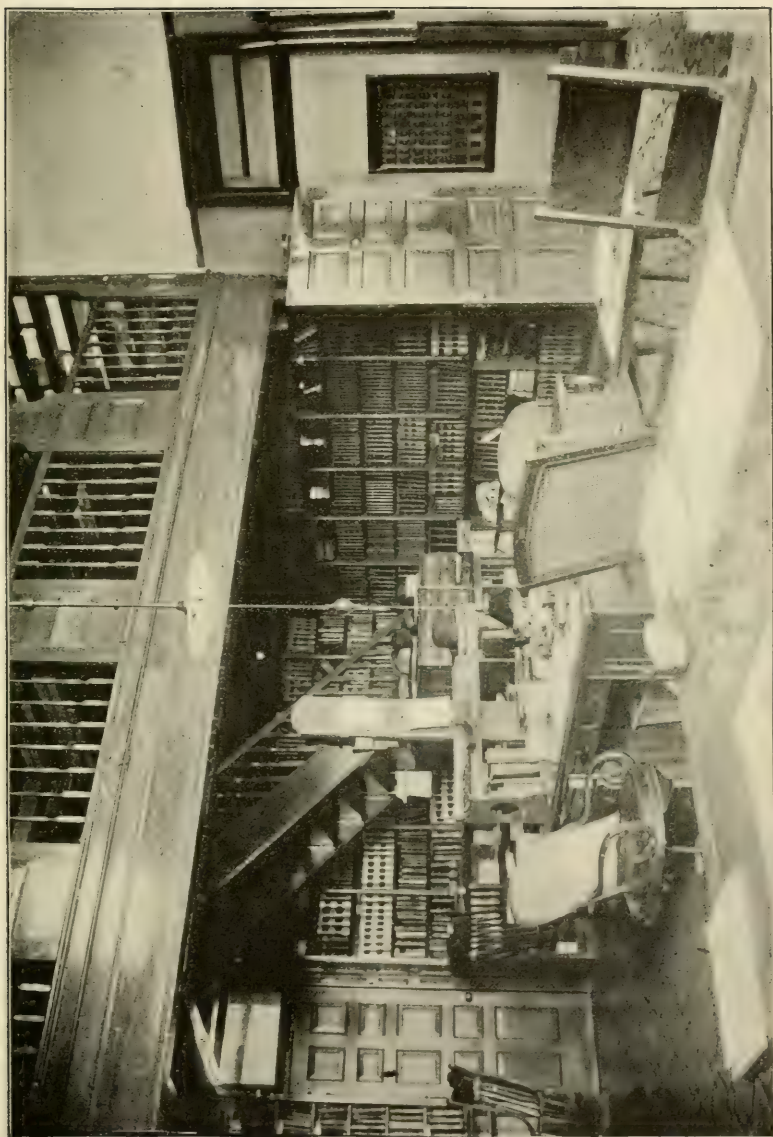
ST. LAWRENCE STATE HOSPITAL.--GROUP THREE.



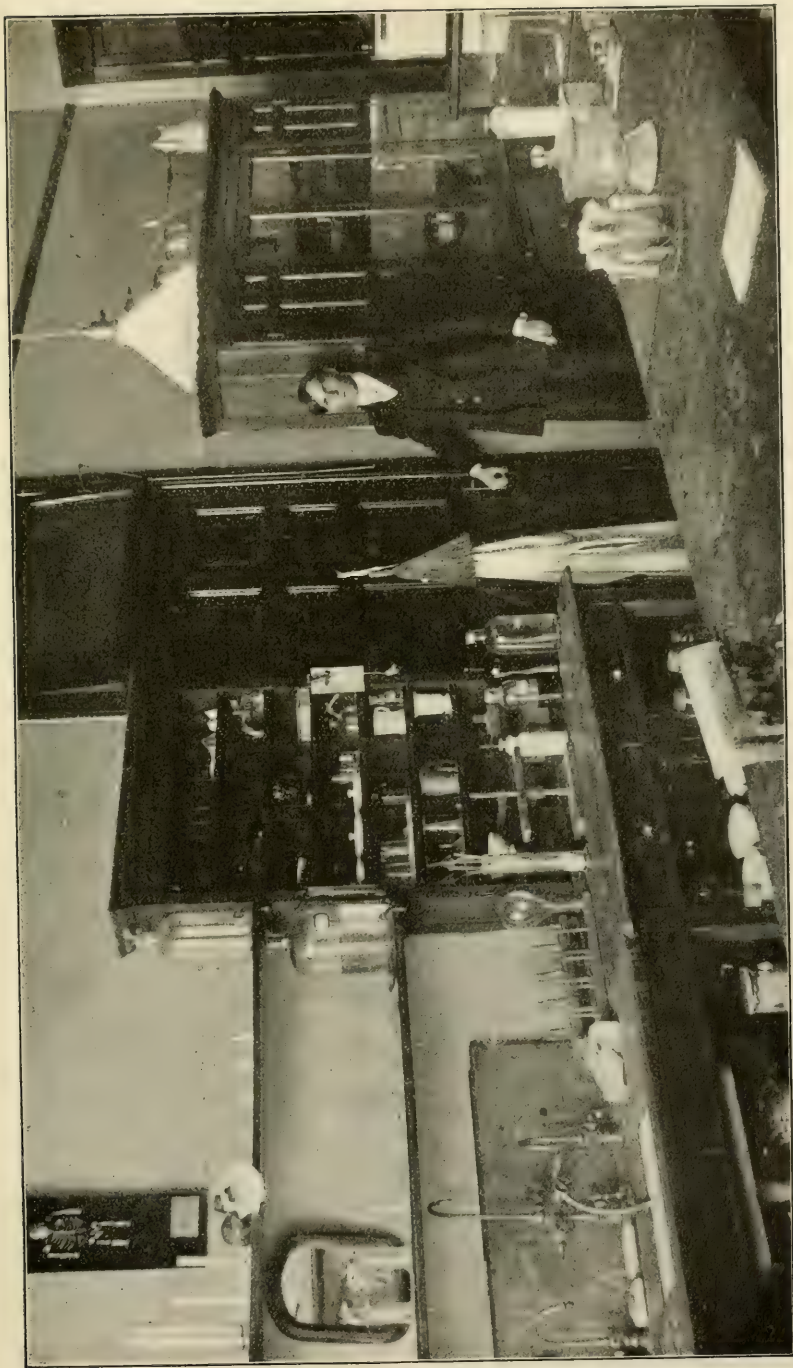
ST. LAWRENCE STATE HOSPITAL.—REAR OF FARM COTTAGE.



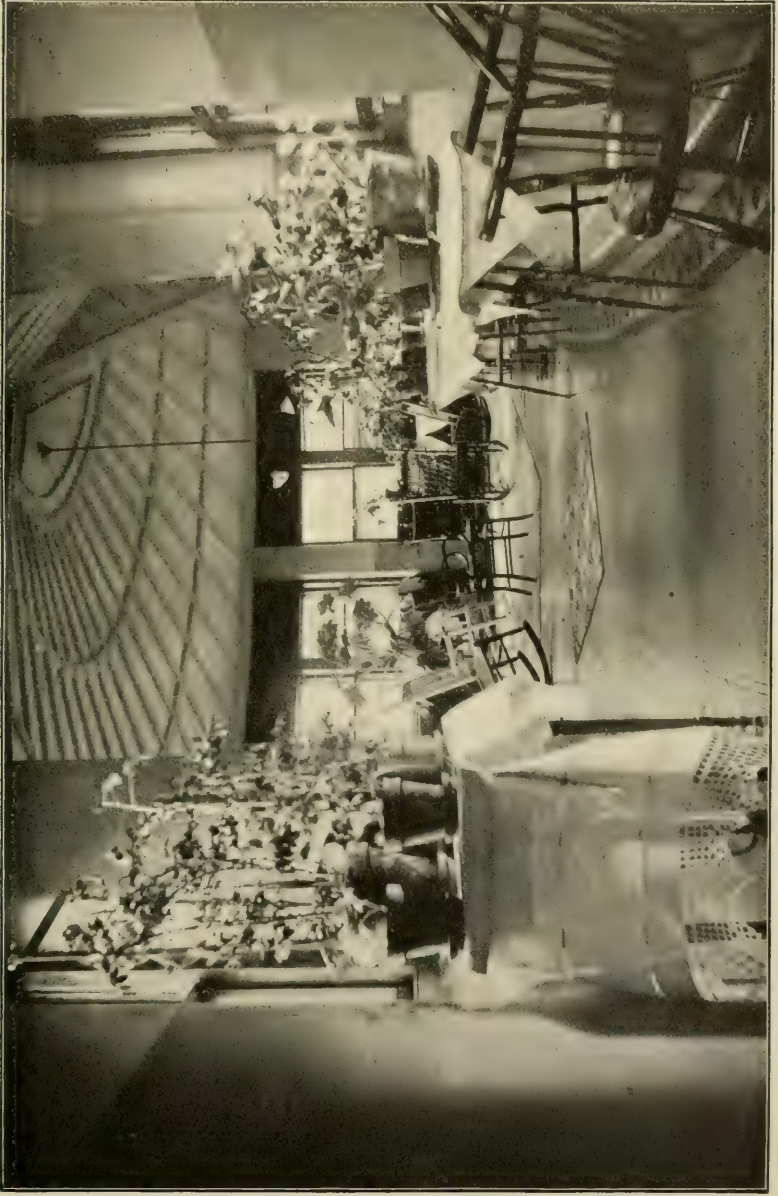
ST. LAWRENCE STATE HOSPITAL.—A GRADING PARTY. INFIRMARY GROUP.



ST. LAWRENCE STATE HOSPITAL.—MEDICAL OFFICE.



ST. LAWRENCE STATE HOSPITAL.—CLINICAL LABORATORY.



ST. LAWRENCE STATE HOSPITAL.—A CONNECTING CORRIDOR FOR CONVALESCENT PATIENTS.

REPORT OF THE MANAGERS

To the State Commission in Lunacy

The managers of the St. Lawrence State Hospital have the honor to report the operations of the hospital for the year ending September 30, 1901, and to make recommendations respecting its needs for the coming year. This report as submitted includes also the treasurer's, superintendent's and steward's reports.

From the treasurer's report it appears that the total receipts of the maintenance fund from various sources was \$296,704.16. Of this \$281,220 was received from the Comptroller on approved estimates; \$14,723.28 was received from steward's sales, from reimbursing patients, from private patients and from clothing manufacturing fund, while \$760.88 represents the balance on hand September 30, 1900, and interest received on deposits.

The disbursements from this fund amounted to \$172,663.45 for supplies, \$93,063.55 for wages, \$17,948.22 for officers' salaries and \$10,704.79 paid to the State Treasurer as receipts from miscellaneous sources. The balance on hand September 30, 1901, was \$2,324.15. The total amount as actually expended for the maintenance of the institution was \$283,675.22. This was divided as follows:

	Total cost	Yearly per capita
Officers' salaries	\$17,948 22	\$10.904
Wages	93,063 55	56.539
Provisions and stores.....	87,534 02	53.179
Ordinary repairs	7,387 61	4.488
Farm and grounds.....	6,346 24	3.855
Clothing	11,100 29	6.743
Furniture	4,257 33	2.586
Books and stationery.....	1,505 01	.914

	Total cost	Yearly per capita
Fuel and light.....	\$39,848 59	\$24.209
Medical supplies	2,374 55	1.442
Miscellaneous	7,981 60	4.849
Transportation of patients.....	4,328 21	2.629
Total	<u>\$283,675 22</u>	<u>\$172.342</u>

A comparison of these expenditures with those for the preceding year shows that there has been a slight reduction. Officers' salaries are slightly increased by reason of medical internes being transferred from estimate two, and by the yearly increase according to schedule. The per capita cost for wages is decreased by reason of an increased population without a corresponding increasing in the working force. Provisions and stores show a slight increase by reason of the increased cost of almost all food supplies; ordinary repairs are slightly decreased; farm and grounds are practically unchanged; clothing is slightly increased but not materially so; furniture shows a considerable decrease; books and stationery are decreased. The per capita cost for fuel and light is greater than last year owing to the increased price of coal, we having had to pay 75 cents a ton more for our soft coal. Medical supplies are slightly increased, as are also miscellaneous expenses and transportation.

The weekly per capita cost shows a decrease from \$3.334 to \$3.314, notwithstanding the fact that many articles of supplies have increased in market value. We believe that any further reduction in the cost of maintenance is likely to result in a lower standard of care, as certainly the sum expended weekly for each patient is a small one considering the fact that we have to heat all our buildings for a greater period of time during each year than almost any other institution in the State, and have at the same time to pay a higher price for coal and also higher freight rates. It may be possible in institutions that are located nearer large cities and that are more compactly built to administer them at a cost not exceeding \$3.10 a week

per patient. In this connection we feel impelled to call the attention of the Commission to the fact that the cost of maintenance is based on the amount expended without giving credit for the earnings of the institutions, which are under the law turned over to the State Treasurer and from which the institutions do not receive any benefit in any way, shape or form. Much publicity has been given through the newspapers of the State to the view that the cost of the insane is constantly increasing, while as a matter of fact there has been a steady decrease for the past few years.

In all the statements that have been made we have failed to see any reference made to the funds that were received from private and reimbursing patients, as well as steward's sales and other sources of revenue. If this view had been considered it would have been possible to have gone to the Legislature with the statement that from the annual per capita cost for each patient several dollars could have been deducted, possibly ten.

To illustrate this point we beg to say that last year the State received from the St. Lawrence State Hospital \$10,704.79. This means that the actual per capita cost to the State would be \$165.878 instead of \$172.342, or a weekly per capita cost of \$3.19 against \$3.314, or a saving of \$0.124 a week per patient.

The general manufacturing fund shows a balance on hand September 30, 1900, of \$625.01, while its receipts from all sources was \$19,783.51, making a total of \$20,408.52. Its disbursements amounted to \$18,410.80, leaving a balance on hand September 30, 1901, of \$1,997.72.

Special funds were received amounting to \$23,227.95 and the disbursements were the same.

The superintendent in his report mentions the improvements that have been made during the year and to this we call your attention. We now submit the following list of our needs for the coming year, accompanied by a brief explanatory statement of each item. We have endeavored to keep within the limitations suggested by you in your letter of the 14th of September:

First—Cement walks, \$1,000.

There is urgent need of sidewalks around all the buildings. As it is now the patients when taking their exercise have to walk on the roads instead of on sidewalks and hence are subject to interference on the part of the public who drive through the hospital grounds. Again, as a result of not having sidewalks, much dirt is brought into the institution.

Second—Cementing basements, \$1,000.

There are still a great many rooms and corridors in our buildings that have never been cemented. This is unhygienic and a menace to health. The dirt basements are damp and generally unsanitary, and it is impossible to keep them clean and tidy.

Third—Farm fences, \$600.

This year a start was made in fencing in part of our land, and it has done much not only to improve the appearance of the farm, but also to aid the head farmer in his work. By putting up fencing cheap in price but of a durable character it will be possible to improve the quality of the land by soiling.

Fourth—Fence to enclose woods, \$400.

At present we have no place to take our patients for out-of-door exercise without exposing them to the gaze of the public. Our property has never been fenced in, and hence the public take advantage of it all through the fine summer weather. We desire to improve the wood land near group three and make it suitable for recreation grounds for our patients. The area is ample for all our needs, and the expenditure of the above mentioned sum will properly enclose it.

Fifth—Iron kettles for infirmary kitchen, \$650.

The old tin-lined copper kettles have been in use since the opening of the institution and the lining is now cracked and practically worn out. To repair them is an expensive matter and when it is done it will not be permanent, as our experience has been that a relined kettle soon wears out. We believe that the plan of using iron kettles in place of tin-lined ones that was adopted in our central kitchen last year will be more satisfactory.

Sixth—Flooring for wards D and E, central hospital west, \$700.

The floors of both these wards, not only downstairs but up, have given out. They are uneven, are of poor material and are in bad condition generally, and it is believed that new floors can be laid for the sum mentioned. These floors are nearly as bad as those which you permitted us to take up and relay this year in the infirmary.

Seventh—Warehouse, \$750.

Last year we asked for an appropriation to build a storehouse alongside our railroad track. We are oftentimes cramped for storage room, and when we receive flour and other supplies in car-load lots we are unable to store them as they should be. For the sum of \$750 we could build a warehouse next to our tracks and store extra supplies, thus permitting us to take advantage of the market when prices are low.

Eighth—Three wooden cottages for married employees, \$6,600.

The system of boarding out the insane, which has been successfully established in Scotland but which has been a partial failure in other places, could well be tried by this State in a modified way, and we would therefore recommend that three wooden cottages be erected at convenient points on the grounds to be occupied by married employees who would look after seven patients in each house. By this arrangement we would provide at a small cost additional accommodation without any additional employees, and at the same time the system of having a few patients live in a family under home-like conditions could be inaugurated, with the advantage over the boarding-out system that they would have skilled medical supervision.

Ninth—Piggery, \$2,000.

The year before last an outbreak of cholera took place and destroyed a large number of our swine. Again during the past summer we lost a number from the same disease. It therefore becomes necessary to provide new quarters for our hogs, and we believe that a house large enough for our present herd could be built for the above-mentioned sum. The house they now occupy was formerly used as a barn, and it is not in any way adapted for the purpose for which it is now occupied. Furthermore, in

order to prevent a recurrence of cholera it is absolutely essential to build on a site a considerable distance from the old pens.

Tenth—Isolation building for cases of tuberculosis and other contagious diseases, \$5,000.

A request for this purpose was made last year but was not heeded. At present we suffer very much from not having it, and we would be recreant to our trust did we not advocate such a building. The superintendent in his report calls attention to the number of deaths that occurred last year from tuberculosis, and also to the presence of various contagious and infectious diseases. When they are present they menace the health of the entire household and jeopardize the lives of both employees and patients, as well as handicap the medical work proper of the institution.

Eleventh—Trees and shrubs, \$300.

Notwithstanding the fact that each year a number of trees and shrubs have been planted, our grounds are still comparatively bare and in need of ornamentation. In addition there is not sufficient shade, and when the trees that we have thus far planted have reached a sturdy growth they will not help very much along these lines and additional trees should therefore be planted each year.

Twelfth.—Addition to cold storage and engine for same, \$2,000.

We can only repeat what we said last year concerning this need. Since our present cold storage was erected the demands upon it have increased, and now that we have gone into the manufacture of butter the matter is of grave importance. Should anything happen to the machinery of this plant a large loss might follow, as we repeatedly have on hand during the summer butter to the value of \$5,000 which belongs to the manufacturing fund and is not included in the other stores which are kept in this building. For a small expenditure a room in the attic could be properly insulated and piped. We have to depend now on one engine, and if this should break down during the summer time the consequences would be disastrous, and hence

we feel impelled to renew our request for a duplicate engine. We think that the probable amount required is not in excess of the figures mentioned above.

Water supply.—We beg to felicitate the Commission upon the good results which have followed the abandonment of our old pumping station and of obtaining our water from an entirely different source. The superintendent reports that there has been practically no typhoid fever since the St. Lawrence river water was discontinued, and we believe that the contract made is of advantage to the State in more ways than one. It has certainly done much to increase the confidence of the public in the institution, because when typhoid was prevalent many just complaints were made about the continued use of the St. Lawrence water.

Governor's visit.—On July 22d Hon. B. B. Odell, Jr., Governor of the State, visited the institution in company with representatives from the Senate and Assembly. His time while here did not permit him to inspect except in a general way the different parts of the institution. We hope that another year he will find it convenient to visit our hospital and spend a few days in studying its plans, methods and results.

Farm operations.—The steward reports that the estimated value of farm and garden products during the year was \$21,072.89, while that of the garden products was \$5,011.41, a total of \$26,084.30. The expenses for wages amounted to \$3,125.99, and the value of articles of produce used as food for cows, hogs, sheep and fowls amounted to \$8,655.50. The amount of material purchased and charged to farm and garden as seen by the treasurer's report was \$6,346.24, making a total of \$18,127.73. This amount being deducted from the value of farm and garden products leaves a net profit of \$7,956.57. The actual profit, however, was much greater, as from the amount of \$6,346.24 we should deduct the sum of \$1,017.25, it being the amount used for the care of grounds, lawns and administration purposes. The net profit therefore would be increased to \$8,973.82. While this report shows a large profit accruing to the farm, it is materially

decreased from the preceding year. Owing to the late and wet season our crop of potatoes was very largely diminished, as was also the oats, grain and other produce.

The farmer is now reclaiming the large field south of Proctor avenue and this, together with other land on which he has been working, will add to our acreage under cultivation.

Comments.—The managers desire to commend the efficient service of the officers and employees of the institution. The nurses and attendants, with few exceptions, have endeavored in every way to assist the medical officers and to second their efforts in caring for their patients. Employment on the ward is naturally unattractive, the hours are long and the duties exacting, and we believe that they are entitled at this time to a public acknowledgment of our thanks.

The relations existing between your Commission and the board of managers have continued cordial, and we believe that while you have found it necessary to reduce and curtail your supplies, you have only had in mind due regard for economy in the expenditure of the State's funds. Nevertheless we beg to emphasize the statement made earlier in this report that a further reduction will be disastrous to the standard of care. It has been possible thus far to get along with what you have been generous enough to deal out, but the clothing of our patients and the bedding, the furniture in general, as well as the household supplies, are now at the lowest they have been since the opening of the institution.

All of which is respectfully submitted.

W. H. DANIELS

GEORGE HALL

JOHN HANNAN

S. H. PALMER

FREDERICK R. HAZARD

HARRIET RUSSELL

MARY P. AVERELL

TREASURER'S REPORT

To the Board of Managers

I herewith respectfully submit the treasurer's report for the year ending September 30, 1901:

MAINTENANCE FUND

Balance on hand September 30, 1900.....	\$395 37
Received from Comptroller on approved estimates of the State Commission in Lunacy from September 30, 1900, to September 30, 1901:	
For officers' salaries	17,970 00
For wages	93,500 00
For supplies	169,750 00
Received for interest on deposits.....	365 51
Received from Steward for sales, rents, etc.....	624 52
Received from reimbursing patients.....	8,321 64
Received from private patients.....	1,875 41
Received from clothing manufacturing fund.....	3,350 33
Received from St. Lawrence State Hospital for 9,636 pounds milk, at 70 $\frac{1}{2}$ cents per c., 37,556 pounds milk, at 70 cents per c. and 30,246 pounds milk, at 73 cents per c.....	551 38
Total.....	<hr/> \$296,704 16

Disbursements

Paid vouchers as per statements sent Comptroller:	
Supplies	\$172,663 45
Wages	93,063 55
Officers' salaries	17,948 22
Paid State Treasurer cash received from miscellaneous sources from September 30, 1900, to October 1, 1901	10,704 79
	<hr/> 294,380 01
Balance on hand September 30, 1901.....	<hr/> \$2,324 15 <hr/>

GENERAL MANUFACTURING FUND

Balance on hand September 30, 1900.....	\$625 01
Received from St. Lawrence State Hospital for butter sold them	14,087 04
Received from Rochester State Hospital for butter sold them	4,661 40
Received from Hudson River State Hospital for butter sold them	217 97
Received from Manhattan State Hospital for butter sold them	50 64
Received from W. C. Hall, steward, sales uniform, etc.	608 98
Received from Dr. William Mabon for 42 pounds butter, at 23 cents	9 66
Received from Hudson River State Hospital for morphine	8 40
Received for interest on deposits	139 42
Total	<u>\$20,408 52</u>

Disbursements

Paid vouchers 1 to 482 as per statement sent Comp- troller from September 30, 1900, to October 1, 1901	18,410 80
Balance on hand September 30, 1901.....	<u><u>\$1,997 72</u></u>

CLOTHING MANUFACTURING FUND

Balance on hand September 30, 1900.....	\$1,720 43
Received from St. Lawrence State Hospital for clothing sold patients	1,624 97
Received for interest on deposits	4 93
	<u><u>\$3,350 33</u></u>

Disbursements

Paid maintenance account by order of State Commission in Lunacy in November and December, 1900	\$3,350 33
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SPECIAL FUND

Received from State Treasury, chapter 570, Laws 1899	\$438 57
Received from State Treasury, chapter 364, Laws 1900	16,773 92
Received from State Treasury, chapter 322, Laws 1901	6,001 89
Received for interest on deposits	13 57
Total	\$23,227 95

Disbursements

Paid vouchers during the year, chapter 570, Laws 1899	\$438 57
Paid vouchers during the year, chapter 364, Laws 1900	16,773 92
Paid vouchers during the year, chapter 322, Laws 1901	6,001 89
Paid State Treasury cash received from miscellaneous sources during year	13 57
	\$23,227 95

JAMES M. WELLS

Treasurer

REPORT OF THE MEDICAL SUPERINTENDENT

To the Board of Managers of the St. Lawrence State Hospital

I beg to present herewith the following report of the operations of the hospital for the year ending September 30, 1901:

POPULATION

There were remaining in the hospital October 1, 1900, 810 men, 796 women; a total of 1,606. During the year there were received 326 patients. Of these, 166 men and 119 women, a total of 285, were admitted upon original orders, while 2 men and 2 women were received by transfer from county houses and 39 men by transfer from other institutions for the insane.

There were discharged during the year 132 men and 129 women, making a total of 261. Of these, 44 men and 43 women, a total of 87, were recovered; 13 men and 16 women, a total of 29, were improved; 8 men and 12 women, a total of 20, were unimproved, and 67 men and 58 women, a total of 125, died. The number remaining in the hospital October 1, 1901, was 883 men and 788 women, a total of 1,671. The daily average population was 847.74 men, 797.86 women; a total of 1,645.6. The number under treatment during the year was 1,932, or 1,015 men and 917 women. The largest number under treatment in the hospital on any one day was 1,695 and the smallest number 1,604.

There were 3 private and 323 public patients received.

ADMISSIONS

For the past few years I have followed the plan of analyzing our admissions and discharges so as to bring more prominently to the attention of your board and to the friends of the institution, as well as to the Legislature, facts of general interest regarding the insane.

Causes.—Of the admissions 48 were ascribed to moral causes, and of these 34 resulted from adverse conditions, such as loss of friends, business troubles, etc.; 10 were due to mental strain,

worry and overwork; 1 resulted from religious excitement, while in 3 cases love affairs were held responsible. In 63 cases the insanity was said to be due to heredity and in 3 it was the result of congenital defect. In 141 cases the mental disturbance was due to some definite physical cause, and of these cases intemperance held first place, as it was responsible in 28 cases. Among the other physical causes we find that old age was responsible in 14, venereal diseases in 13, epilepsy in 11, change of life in 10, accident or injury in 6, epidemic influenza in 5, abuse of drugs in 5, diseases of the skull and brain in 5, sunstroke in 4, parturition and puerperium in 4, masturbation in 3, exophthalmic-goitre in 1, and sexual excess in 1. In 71 cases it was impossible to ascertain the cause. In 148 cases an inherited predisposition was said to exist. This represents a percentage of 45.4 of all the admissions. No tendency was said to exist in 115 cases, a percentage of 35.27, while in 63 cases, or 19.3 per cent., we did not discover whether heredity existed or not. These figures seem to bear out the opinion that is becoming more and more general each year that hereditary predisposition produces a mental instability which becomes apparent under slight stress of one kind or another. Of the cases with a history of heredity we find that 60 were transmitted from the paternal branch, 44 from the maternal branch, 10 from the paternal and maternal branches and 34 from collateral branches. These figures are different from those found during the preceding year, where the maternal transmission was the greatest.

Since the opening of the institution we have cared for 4,226 patients, and of these a distinct history of heredity was obtained in 1,442 cases, or 34.12 per cent. In 1,410 cases, or 33.36 per cent., heredity did not exist or else was denied, while in 1,374 cases, or 32.51 per cent., it was impossible to ascertain in facts regarding its existence.

Since the opening of the institution we find that in 469 cases the transmission was from the father's side, in 520 cases it was from the mother's side, in 89 cases the transmission came from both parents, while in 404 cases it was collateral.

It may be of some interest here to point out the association of heredity with moral causes. In 34 cases due to adverse conditions heredity was present in 14, in 12 it was unascertained, while in 8 it was said not to exist. In 10 cases due to mental strain, worry and overwork there was an inherited predisposition in 5 cases, while in the single case due to religious excitement we had a distinct history of heredity.

Form of insanity.—Table No. 4 gives the form of insanity in those admitted, recovered and died during the year, and we find by looking it over that there were admitted 52 cases of acute mania and 8 cases of acute melancholia, 4 of recurrent mania, 81 of acute melancholia and 28 of chronic melancholia. Of the cases that offered but little hope of recovery 44 suffered from chronic mania, 11 from paranoia, 15 from general paralysis and 72 from terminal dementia. There was a third class which in a few cases offered a slight hope of restoration to their previous and perhaps normal mental state. Of these 4 were cases of primary dementia, 7 of epilepsy with insanity, and 8 of imbecility with maniacal attacks. The percentage of recoveries in cases of acute mania since the opening of the institution remains somewhat higher than in melancholia. In the former, for instance, the percentage is 55.61 per cent, while in the latter it is 48.14 per cent.

Civil condition.—The civil condition of the cases admitted was as follows: Single men, 93; women, 39; total, 132. Married men, 85; women, 65; total, 150. Widowed men, 17; women, 14; total, 31. Divorced men, 5; women, 3; total, 8. Unascertained, 5 men.

It will be seen from these figures that there was a higher percentage of insanity among the unmarried men than among the unmarried women, whereas the percentage of insanity among married women was greater than among married men. Since the opening of the institution we have treated 1,868 unmarried people, and of these 1,137 were men and 731 women. We have had 1,825 patients who were married, namely, 947 men and 878

women; 482 of our cases were widowed, and of these 194 were men and 288 were women; 30 of our patients had been divorced, namely, 13 men and 17 women. Facts like these are perhaps of not much importance, yet the question is frequently asked whether married people are more apt to become insane than the unmarried.

Degree of education.—The largest number of those admitted during the year received a common school education, namely, 196; 16 had a collegiate education, while 22 had an academic education; 32 could read and write; 9 could read only; 26 had no education, while in 25 cases the degree of education was unascertained.

Age on admission.—Of those admitted 193, or a fraction over 59 per cent., were over 40 years of age, while 133, or a fraction over 40 per cent., were under 40 years of age.

Occupation.—Table No. 17 represents the occupation of those admitted, and we find from it that 10 followed some profession, 31 led a commercial life, 51 an agricultural and pastoral life, 28 were mechanics at outdoor vocations, 18 were mechanics at sedentary vocations, 19 were in domestic service, 83 were engaged in educational and higher domestic duties, 10 in sedentary occupations, 50 were laborers, while 21 had no occupation, and in 4 of our cases the occupation was unascertained.

Nativity.—Of those admitted since the opening of the institution the parents of 41.37 per cent. were both of foreign birth; in 5.27 per cent. the parentage on the paternal side was foreign, while that on the maternal side was native; in 3.21 per cent. the parentage on the maternal side was foreign, while that on the paternal side was native. The largest number of admissions naturally comes from the United States, and this country is represented by 232 cases, Ireland and Canada each is represented by 26 cases, Germany by 15 and England by 7. The percentage of natives therefore is 71, while that of foreign birth is 19.

DISCHARGES

There were discharged as recovered during the year 87 patients. This represents a percentage of 30.52 on original commitments, 4.5 on total number under treatment, 5.29 on daily average population and 33.33 on the discharges. Of the recoveries 30 had been insane less than one month previous to admission, 22 from one to three months, 16 from three to six months, 9 from six to nine months, 3 from nine months to a year, 3 from one year to eighteen months, 2 from two to three years and 2 from five to ten years.

The period under treatment in 68 cases was less than a year, while in 19 cases it was more than a year. Of these 19 cases, 9 had been under treatment from one year to eighteen months, 4 from eighteen months to two years, 3 from two to three years, 2 from three to four years and 1 from five to ten years.

The death-rate, based on whole number treated, is 6.47 per cent. against 7.89 per cent. for the preceding year.

Of the 125 deaths, 25 were under 40 years of age, while 100 were over 40. Of the latter, 27 were from 40 to 50 years of age, 22 from 50 to 60, 26 from 60 to 70, 18 from 70 to 80 and 7 from 80 to 90. Forty-two deaths resulted from specific infectious diseases, and of these 25 were due to tuberculosis; constitutional diseases caused the death of 2 patients; diseases of the digestive system the death of 7; diseases of the respiratory system the death of 9; diseases of the circulatory system the death of 12; diseases of the blood and ductless glands the death of 10; diseases of the nervous system the death of 14; mental diseases the death of 17; debility of old age the death of 7; malignant growths the death of 4, while 1 committed suicide. Going still further into analysis of deaths, we find that 46 occurred among those who had been insane less than a year before admission, while in 79 cases the duration previous to admission had been more than a year. In 53 cases the period under treatment was more than a year—as a matter of fact 44 of these cases had been hospital residents more than four years.

Suicide.—I regret to report that on the 18th of October, 1900,

one of our patients escaped from group three, and every endeavor was made to find him, but without avail. On the 20th of October he was discovered by a farmer, who found him hanging to a tree in the town of Lisbon. The coroner was notified and an inquest was held, with the result that the institution was exonerated from blame in the matter. There was nothing in this patient's history to indicate that he even meditated such an act. It is indeed remarkable that suicides do not occur more frequently in institutions of this character. This is the first that has taken place since May 24, 1898, although a large proportion of cases each year have a distinct history of suicidal impulses—in fact, during the past year 30 per cent. of our admissions had either threatened or attempted suicide.

MEDICAL SERVICE AND RESIDENT OFFICERS

The following changes have taken place in the medical staff: Dr. Robert W. Fowler resigned December 1, 1900, as medical interne to accept the position of junior assistant at the Manhattan State Hospital, Central Islip; on February 26, 1901, Dr. E. A. Nevin resigned as medical interne and became junior assistant at Long Island State Hospital, Kings Park. These vacancies were filled by the appointment in March, 1901, of Dr. C. M. Burdick and in August, 1901, of Dr. N. A. Pashayan.

The services of Dr. Bell as ophthalmologist and of Dr. Butler as dentist continue to be of great advantage to the institution and of material aid to the resident medical staff.

The medical work has been very largely increased by the presence of infectious diseases. During the month of February more than one-third of our employees were ill with influenza, and there were not enough left to care properly for the patients. In addition, we had a severe outbreak of erysipelas in the new infirmary wings, as well as dysentery in the infirmary group. These diseases, occurring as they did among the infirm class, were fatal in a large number; in fact, three patients died from erysipelas, while 8 died from dysentery.

As the institution grows older more cases of tuberculosis develop, and last year 25 of our deaths were from this disease. Since the opening of the institution in 1890 there have been a total of 101 deaths from tuberculosis, and of these about 25 per cent. took place last year, showing a very marked increase over the preceding years. For instance, up to the year ending September 30, 1900, there were only 96 deaths from this malady. It therefore becomes a grave question as to what should be done to isolate cases of this character. It is not only dangerous to the other patients on the wards where these cases are kept, but it is also of great import to the nurses and attendants; not only to those who have to assume the immediate charge of them, but to all who are brought in contact with them even for a short time. It seems therefore advisable, as soon as means can be made available, to erect cheap buildings where all infectious and contagious diseases can be isolated. For the past two years we have asked for an appropriation sufficiently large to build a wooden cottage for all cases of this nature, but the Commission have not responded to our appeals. If we had had a suitable place to care for our cases of erysipelas we could have done much to have prevented its constant presence each year in the institution.

Since entering into a contract with the city to supply us with water, we have had only three cases of typhoid fever, and of these one was contracted by an attendant when away from the institution; a second took place shortly after the change was made, while the third case could not be traced, although we do not believe that it was due to the water we now use, because if the present supply was contaminated we should have had a large number of cases, as we have ceased to boil our drinking water and have removed all restrictions regarding its use.

During last winter smallpox was very prevalent in several cities and towns in our hospital district, and as a precaution we vaccinated all our patients and employees.

AMUSEMENTS

Aside from the usual amusements provided in the hospital for our patients we have had entertainments by outside companies. Among these was one on April 16th by Hanlon's Superba Company; a vitoscope exhibition on the 7th of May; Sells Bros.' circus on July 9th, attended by 198 of our patients, and an entertainment on September 4th by the Kennedy Company.

A number of parties and ward entertainments were given on the wards and were thoroughly enjoyed by all those who were able to attend. On December 6th and 7th a fair was held by the patients, the net proceeds of which provided almost enough money to purchase a piano, the balance being paid from the amusement fund. The first object of the fair was not to raise money, but rather to provide occupation for certain of our patients who refuse to do anything on the wards, and therefore spend their days in idleness. The result from this standpoint was highly satisfactory, and the needlework and fancywork of many patients was of an unusually high order. The institution itself did not expend one cent for materials used in the fair; the expenses were guaranteed by one of the officers.

In view of the success reached last year it is our purpose to make it one of the features of hospital life, and a number of patients are now at work preparing articles for the fair to be held in November, 1902.

The patients' library was removed from the medical office to a room in recreation building. It has been arranged and catalogued by one of our patients, who takes entire charge of it. This change has resulted in an increased use of reading matter, and has also done away with the annoyance and interruption which always used to take place in the medical office when books were being issued.

During the summer out-of-door basket ball was introduced and it was the means of entertaining many of the patients, who entered into the game with considerable interest.

The Christmas distribution of gifts was thoroughly successful, as was also the Field Day, which was held on September 7th. At the latter over one thousand patients were present.

OCCUPATION

Every endeavor has been made to provide work for our household, and it seems unnecessary to emphasize the importance of this feature of treatment. We succeeded in occupying over 65 per cent. of our patients. Our extensive grounds with its farm and gardens offers peculiar advantage for out-of-door recreation, and a large part of all outdoor work has been performed by patients. They have been engaged in grading, building new roads, fencing in farm lands, reclaiming bad lands, ditching, drawing stumps and similar work as well as the usual work performed on the farm and in the garden. In addition our industrial and other shops have had large numbers of patients employed.

TRAINING SCHOOLS

I beg to incorporate in this report a copy of a circular issued to all applicants giving them such information as may be needed for their guidance. It also briefly refers to the character of the hospital and the training school:

INSTRUCTION TO APPLICANTS

These notes are chiefly intended to answer the numerous questions that are asked by applicants, regarding the duties they have to perform, rate of wages, and the privileges allowed them. Sometimes they claim they come into the service without knowing the requirements, and hence are easily dissatisfied. The following observations give in outline the information usually asked for, and all that is required by the applicants to give them a reasonable knowledge of the duties required. It is advisable for the applicant to keep this folder for reference, even if employed. The rules herein given will not be departed from, except after proper notice, or a change becomes necessary for the welfare of the hospital service.

APPLICATIONS

All applications must be made upon forms prescribed by the Civil Service Commission, and these forms will be supplied at

the hospital or sent by mail to all persons applying for them. They must be made out in the applicant's own handwriting—3d and 4th pages must not be filled out.

ANSWERS TO APPLICATIONS

When an application is received, it is considered by the superintendent, indexed and filed. When a vacancy occurs, the standing applications are reviewed and a selection is made. No reply to an application means that there are either no existing vacancies, or that the applicant is not satisfactory, therefore further correspondence is needless. The filing of your application is simply a request to be employed and does not mean that the hospital is committed to employing you.

RATE OF WAGES FOR ATTENDANTS OR NURSES

The established rate of wages for this service upon January 1, 1896, and until further notice, is as follows: Women attendants are paid \$14 per month at the start. They are not permanently employed until after a trial period of not more than two, or less than one month. Every six months thereafter they are increased \$1 per month until they reach \$18 per month. Night attendants are paid \$1 per month additional. Men attendants commence at \$20 per month and are governed by the same rules, increasing until they reach \$24. If women perform service upon wards for men patients, releasing thereby a male attendant, they are paid the same as men. Dining-room attendants commence at \$13 per month and have an increase of \$1 per month annually.

The trial period must be arranged to end at the close of a calendar month. During this period employees can be dismissed summarily, if it is considered their services are going to be unsatisfactory. The time for the first increase of wages is counted from the first of the month following date of employment. Wages commence, however, from the first day of employment. Members of the training school for nurses get the same wages as other attendants during their course, but are paid

more after graduation. They are preferred in promotions, other qualities being equal.

All attendants and nurses receive board and washing.

EXPENSES

The only expense that is called for after reporting for duty is for uniforms required. These need not be provided until the period of probation is ended. The material for women's uniforms is furnished at the hospital at actual cost. One complete suit costs about \$2 and consists of material (Toil du Nord) for a dress, for a cap and apron, and a collar and a pair of cuffs. These articles cannot be made before coming here, as they require the established pattern. The uniforms for men consist of a suit of blue broadcloth and a cap, buttons to be brass of the hospital pattern. These suits are to be purchased from reliable dealers approved by hospital authorities. Members of the training school are furnished their books at actual cost, wholesale rates.

PRIVILEGES OF ATTENDANTS AND NURSES

As far as the welfare of the hospital permits, attendants and nurses are given regular hours of duty. At other times they are relieved from responsibility.

They are allowed fourteen days' vacation annually, but it is required that at least 12 months' service shall be rendered before this vacation is given. It must also be taken at such times as suit the convenience and welfare of the service. Such vacation is also to be taken for the purpose of rest and recreation, and if it is employed at labor outside of the hospital, or at home nursing, it will not be considered a vacation and will be deducted from wages. Each attendant has, in addition to the above time, every fourteenth day and every third Sunday, which makes a total of 56 days each year allowed for rest, with continuance of pay. Attendants can be required to postpone these days at any time if the exigency of the service requires it. This vacation rule applies only to employees engaged in the daily care of patients.

Leave of absence will not be granted to attendants in order to go home and nurse members of the family. The superintendent will treat such absence as a breach of agreement. Sometimes family misfortune calls for the absence of the attendant, but the superintendent is to pass upon its necessity.

HOW TO REACH THE HOSPITAL

The railroads reaching the city of Ogdensburg, are the Ogdensburg and Lake Champlain from the east, and the Rome, Watertown and Ogdensburg from the south and west. A trolley road connects the hospital with the city and the several railroad stations, and its cars run every fifteen minutes. When employed persons reach the hospital they should go to the public reception room in the executive building and send in their name and the fact of their engagement to the superintendent, or his representatives.

LOCATION OF ATTENDANTS

It often happens that applicants state they will enter the service if they can be located upon certain wards. These applications are given no consideration and are not indexed, but are destroyed. We do not desire persons in the service who are so inflexible that they cannot perform their work where they are most needed. When they enlist here, they place themselves, like privates in an army, under the direction of the commanding officer, and perform the duties that are assigned them. The more cheerfully and readily they do this, the better becomes their understanding. Under no circumstances will attendants be permitted to select their location or particular work. We have no use for an attendant that cannot undertake the care of any sick or insane person.

CIVIL SERVICE EXAMINATION

Attendants and nurses are subject to a civil service examination before employment. This examination is simple and shows the applicant's ability to read and write and do ordinary sums in arithmetic, such as addition subtraction, etc. Any person having a common school education should be able to pass it.

CHARACTER OF THE HOSPITAL

Applicants occasionally are under the misapprehension that this is a general hospital. It is a hospital for the insane only, created, built and maintained by the State of New York for the treatment of the insane in the northern district of the State. Applicants who are accepted should come to the hospital with the understanding that all the patients are to be regarded and are treated as sick persons.

TRAINING SCHOOL FOR NURSES

The hospital maintains a training school in which both women and men are trained in general as well as mental nursing. Our facilities for giving a thorough general training are excellent as the insane are subject to the same diseases that the sane are. In fact in the majority of cases insanity is complicated with other bodily disorder. The course is two years. The school year begins in September and lasts until May. The first year is called the junior year and the second the senior year. Applicants must understand that they cannot enter the school at any time, but must commence at the beginning and take the full course. Before being accepted as students of the training school they must pass an entrance examination in the common school branches. There are two terms in each year and at the end of each term there is an examination. To those who pass the final examinations the board of managers issue a diploma certifying them "trained nurses." The course of study and the requirements are rigid, and no applicant should enter with the idea that the course is only perfunctory for in this they will soon be undeceived. The instruction consists of weekly lectures, recitations, clinical—that is, bedside—instruction in the care of the sick, and in the preparation of food for the sick, massage, electricity, bandaging, the taking and recording of temperature, pulse, respiration, etc., etc. Applicants should fully understand that good health is a prerequisite for a nurse and that any tendency to invalidism unfits a person for the profession of nursing. No person should undertake the course

merely for the education it gives them, but should resolve to give a reasonable portion of their lives to the relief of the sick and unfortunate.

RULES AND REGULATIONS

A copy of rules is given to each employee upon entering the service, and they are allowed a sufficient time to read and study them. Afterward, if they break them, they cannot plead ignorance. Violation of the rules—or their intent—is met, according to the seriousness of the violation, with (1) an admonition, in which the wrongdoing is pointed out to them, and they are admonished to avoid it thereafter. An admonition does not become a matter of record. (2) A reprimand, which becomes a matter of record, follows a more serious violation, and a third reprimand received by an employee, is equivalent to a discharge; and (3) a summary discharge, which follows a distinct violation of the rules from gross neglect, or as a result of vicious or immoral tendencies. This must be reported to the State Commission in Lunacy and to the Civil Service Commission at Albany, N. Y., and becomes a matter of State record, thus prohibiting such employee from again entering the State hospital service. No well-meaning person will have any difficulty whatever in following the rules to their fullest intent, and thus achieving an honorable record for themselves, and rendering an important service to the State.

Although the hospital is not responsible for the morals of an employee, a good reputation is required for entrance into and continuance in the service. Immorality of any kind renders a person unfit for the care of patients. Intoxication leads to summary discharge. Honesty, sobriety and fidelity may be properly accepted as the motto of the successful employee.

It is anticipated that the above furnishes all the information that will be required by applicants. All correspondence must be addressed to the medical superintendent.

DR. WM. MABON

Ogdensburg, N. Y.

It has been suggested that the course of instruction be increased from two to three years, and this matter is now being considered by a committee of hospital superintendents who will later on submit a report to the conference. In the meanwhile we are making every endeavor to maintain the high standard of our school. That it has been successful there is no question. We see it not only in the higher standard of care given to our patients, and in the intelligence manifested by the nurses and attendants, but it also comes to us in reports from physicians in general practice who have observed our graduates in general nursing. The institution thus has not only benefited itself by maintaining the training school, but it has rendered a public service by sending into the world nurses who are able to be of material aid to physicians in the treatment of diseases in general.

The senior class for 1900 and 1901 was composed of 14 members, of whom 12 received the diploma. I deem it advisable to again incorporate in our annual report the announcement of our training school.

COURSE OF INSTRUCTION

Junior Class

To determine the fitness of candidates the course begins with a preliminary examination, which is uniform throughout the New York State hospitals.

On Wednesday afternoons throughout the school year lectures are held in the lecture hall of the recreation building, recitations occurring in the same building on Thursday evenings. During the first half of the year the practical work includes elementary bandaging and the management of accidents and emergencies, being such instruction as will at once add to the efficiency of the nurse, while in the latter half it is largely in the line of physical training.

In January a written examination is held, continuance in the class depending upon successfully meeting this test. The oral

and practical examinations at the close of the junior year are conducted by the staff, the average standing being determined from the rating in examinations and the records of class work. In addition, a written examination is held by a committee of State hospital superintendents. The text-book required in the junior class is volume I of "A Text-Book for Training Schools for Nurses" (Wise), copies of which, with other school material, may be obtained from the steward at wholesale prices.

Senior Class

Advancement to the senior class occurs only after all of the obligations of the junior year have been met. The work begins with practical lessons in cooking, conducted in the central hospital kitchen. These lessons are supplemented by four weeks of practice in the preparation of food for the sick. Lectures and recitations are held according to schedule in the lecture hall of the recreation building.

Practical exercises in massage are carried on for twelve weeks. To supplement the instruction in bandaging given during the junior year, advanced lessons are given to the seniors. Each member of the class is required to serve at least three months on one of the wards devoted specially to the care of the sick, where systematic instruction is given as indicated in the schedule at the end of this calendar.

To add to the practice in obstetric and gynecological nursing, the members of the senior class are detailed to assist in the examination of cases in the surgery at 10 a. m. on Mondays and Wednesdays. Practical instruction on special subjects, particularly with reference to case recording, care of records and charts and the observations of symptoms, is given at the bedside on Friday afternoons, as indicated in the calendar.

A record is kept of each pupil's standing in recitations and practical work, which, with the ratings of examinations held at the close of the year by the staff of teachers, determines the average standing of the pupil. Those members of the class who are thus found competent are recommended to the committee

of superintendents for the final examination leading to graduation, which occurs after two years of training has been completed. The diplomas are recognized by all of the New York State hospitals.

Graduates are requested to attend the senior lectures whenever opportunity offers.

The text-book required in the senior class is vol. II of "A Text-Book for Training Schools for Nurses" (Wise). The following are recommended as works of reference: "A Text-Book for Nursing" (Weeks-Shaw); "Nursing" (Hampton); "Massage and Swedish Movements" (Ostrom); "A Manual of Child-bed Nursing" (Jewett).

SCHEDULE OF PRACTICAL WORK IN REQUIRED THREE MONTHS' HOSPITAL-WARD COURSE

First Week

Monday—Bed-making and changing of bedridden patients.

Tuesday—Use of bed vessels.

Wednesday—Poultices and poulticing.

Thursday—Service of food in bed.

Friday—Care of mouth, teeth and hair.

Second Week

Monday—Hot and cold applications.

Tuesday—Sponge baths.

Wednesday—Surgical dressings.

Thursday—Cold and hot packs; mustard foot bath.

Friday—Preparation for artificial feeding and lavage.

Saturday—Preparation of egg-nogg, milk punch, lemonade; peptonizing milk.

Third Week

Monday—Enemata.

Tuesday—Catheterization and bladder irrigation.

Wednesday—Disinfection and fumigation.

Thursday—Thermometry, pulse and respiration.

Friday—Plaster of Paris dressing.

Fourth Week

Monday--Collection and care of fluids for analysis.

Tuesday--Approximate weights and measures.

Wednesday--Surgical dressings.

Thursday--Electricity, chiropody.

Friday--Use of hypodermic syringe.

Saturday--Administrations of medicines and care of poisons.

Instruction in keeping clinical records, observation of symptoms, bandaging, use of Faradic battery and massage is given daily until each pupil becomes proficient.

We are again under obligations to the following physicians of Ogdensburg who assisted us by delivering lectures on special subjects: Drs. Madill, Bell, Brown, Hanbidge and Cooper.

NOTES ON CONSTRUCTION

New water supply.—A contract was made with the board of water commissioners of the city of Ogdensburg for the water supply for our institution at an annual rate of \$4,000 for as much water as might be needed up to 400,000 gallons a day. If during any week the supply should average over 400,000 gallons a day the hospital is to pay at the rate of 3 cents per thousand gallons.

The water commissioners agreed to extend the water mains to the hospital line at their own expense and to install a line of 14-inch water pipe, approximately 5,700 feet in length, on the hospital grounds for the sum of \$11,400. This work was performed last fall and early in December the St. Lawrence water was discontinued. The hospital under contract had to install a water meter, and this was furnished by the Union Water Meter Co., at a cost of \$750. In addition there were certain minor expenses for extending the fire-alarm line to the pumping station of the water board, and also the expense of building a meter well and house to cover it. Under the contract the pressure for ordinary purposes was to be fifty pounds, and after the water was turned on it was found that there was no difficulty in maintaining this pressure, neither was there any

difficulty in getting sufficient fire pressure to throw a stream on the top of our highest building; hence we feel that the new water supply has not only furnished us with an abundance of soft, wholesome water, but it is also adequate to protect us in case of fire occurring in any of our buildings.

At the time the contract was entered into there was some question as to whether or not the board of water commissioners had the right under the law to sell water to parties outside of the corporate limits of the city, and to avoid the possibility of any hardship being worked to the institution by an injunction, a bill was passed by the Legislature and signed by the Governor extending the corporate limits of the city of Ogdensburg so as to include part of the hospital premises. This bill also legalized the contract made between the city and the board of managers.

Grading.—The work of grading around the infirmary wings has practically been completed, with the exception of the top dressing, and a new road was built so as to take the traffic away from these buildings. This work has been done by patients' labor, with the exception of a laborer to crush the stone and to roll the roads. In addition part of our road system has been picked up and rerolled and the whole system is now in excellent condition.

Trees and shrubs.—A number of trees, such as maples, poplars, elms and white-birch, were purchased and planted last fall.

Hanna purifiers.—The four Fitzgibbons boilers in the new part of the boiler house have been supplied with Hanna purifiers at a cost of \$680. This addition was made at the suggestion of the boiler inspectors, and thus far has been of great utility.

Root house.—The root house erected last year was not sufficient for our needs and the Commission made an appropriation for erecting a new one, which is now finished.

Chicken house.—An additional chicken house and duck house was also built during the summer which contains many features which should make it superior to the one built last year.

Storage shed and rag house.—We have completed a storage

shed and rag house, and this has done much to facilitate the care of odds and ends. In the rear of this we have constructed a house for the engine used in crushing stone, and the stone crusher will soon be moved to this location. This will permit us to remove from the public highway an unsightly structure and will enable us to crush stone at a more central point.

Cow barns.—The cow barns were very much in need of paint and the Commission set aside a sufficient sum to give them two coats.

Plainer and shaper.—We have placed in our machine shop a planer and shaper which enables our mechanics to do certain work which formerly had to be sent to town, thus saving not only money but also valuable time.

Cement sidewalks.—One of the greatest improvements has been the laying of cement walks at the entrances to all the buildings in central hospital west and part of the entrances to central hospital east. The Commission at the time of their official visit expressed their approval of this work and manifested a disposition to make an appropriation during the coming year for additional walks.

Work now in progress.—Other appropriations for construction and extraordinary repairs and improvements have been made by the Commission, but have not yet been completed. Among the items may be mentioned:

Trees and grass seed, \$214.10. This appropriation was made so late in the season that it was impossible to purchase trees in proper time for spring planting.

Vitrified and agricultural tile, \$345.86. This has been purchased but will not be laid until fall.

Farm fences, \$471.50. Work on this was also postponed until fall. It is proposed to enclose the large field facing on Proctor avenue, on the old Lisbon road.

Cemetery fences, \$83.20. This has been ordered but has not yet arrived, but will be erected as soon after reaching the institution as is convenient.

New arc lighting equipment, \$1,695.69. The dynamo, motor

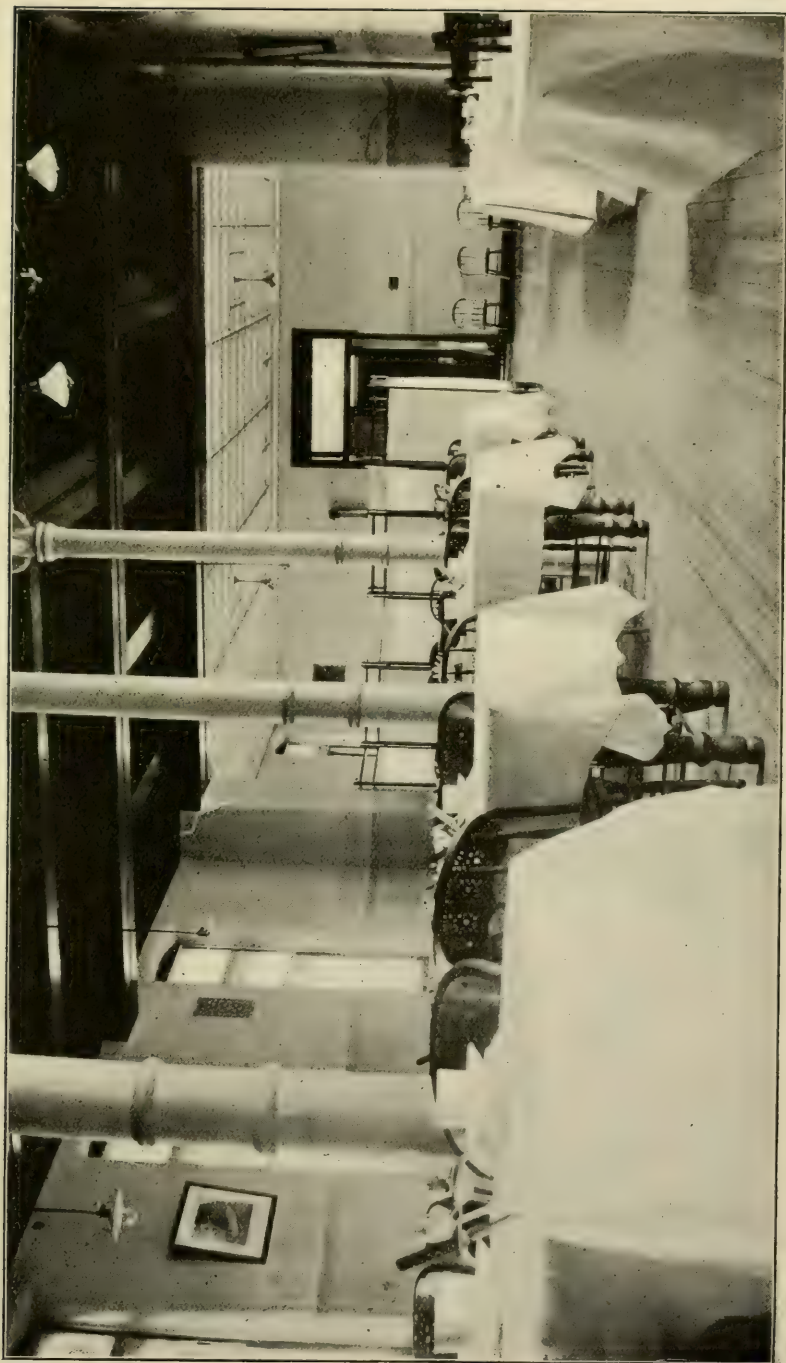
lamps, wire, etc., for this equipment have been ordered, but it requires time to manufacture them owing to the rush of orders for all kinds of machines due to the mechanics' strike early in the summer.

SUGGESTIONS FOR THE COMING YEAR

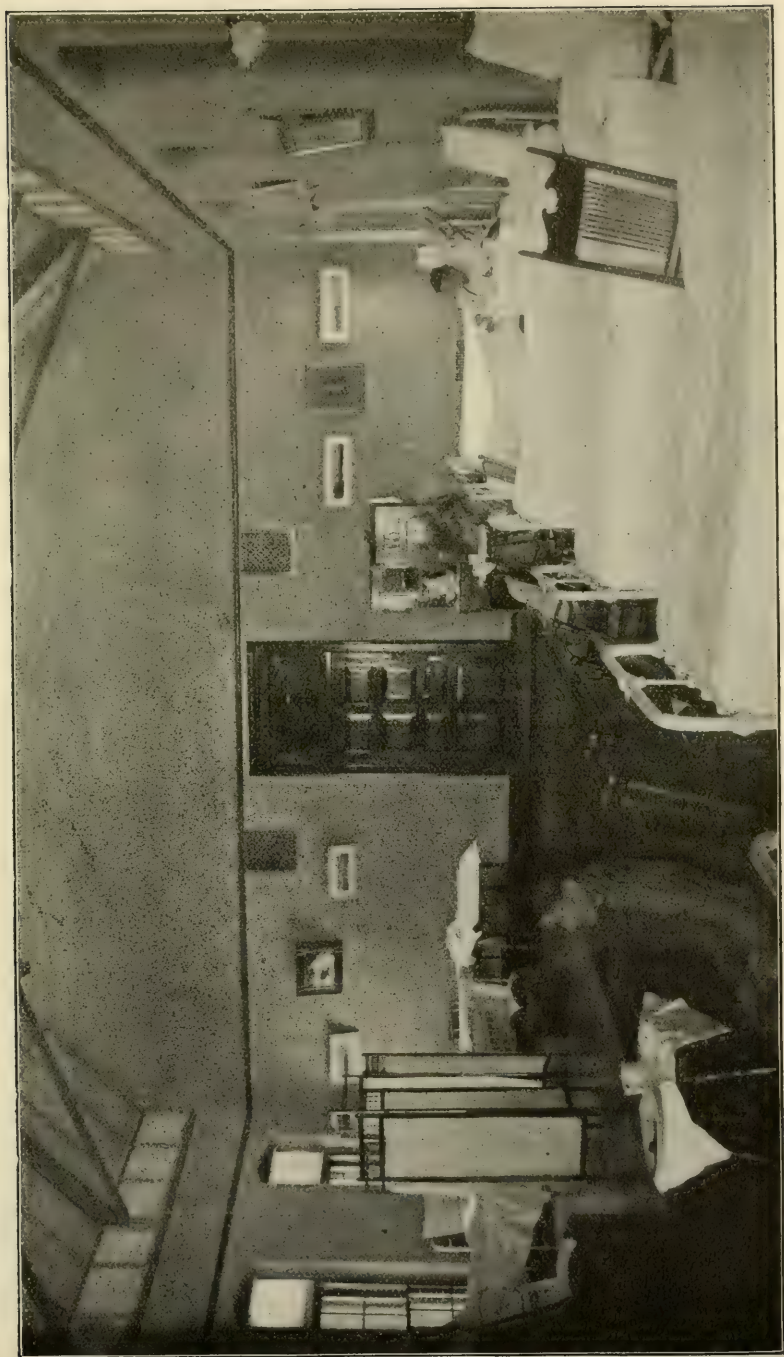
Under date of September 14th the State Commission in Lunacy requested a complete list of extraordinary repairs and improvements needed for the coming year and requested us to omit items for additional accommodation, explaining that overcrowding would be relieved by transfer of patients, either to the new building at Central Islip or those to be built the coming year at Rochester and Gowanda. They further insisted that the list should contain only items which have as their object improvement of hygienic conditions, economy in maintenance, or the prevention of actual deterioration in buildings already equipped. In response to this request I therefore submitted the following list:

1. Cement walks.....	\$1,000
2. Cementing basements	1,000
3. Farm fences	600
4. Fence to enclose woods.....	400
5. Iron kettles for infirmary kitchen.....	650
6. Flooring for wards D and E west.....	700
7. Warehouse	750
8. Three wooden cottages for married employees...	6,600
9. Piggery	2,000
10. Isolated building for cases of tuberculosis and other contagious diseases.....	5,000
11. Trees and shrubs.....	300
12. Addition to cold storage and new engine.....	2,000

In reference to the above list it may be said that we asked the Commission for an appropriation of \$500 for iron kettles for infirmary kitchen. We have since obtained prices from the manufacturer and we find that they will cost \$618.80, to which freight must be added, and the sum therefore needed is \$650.



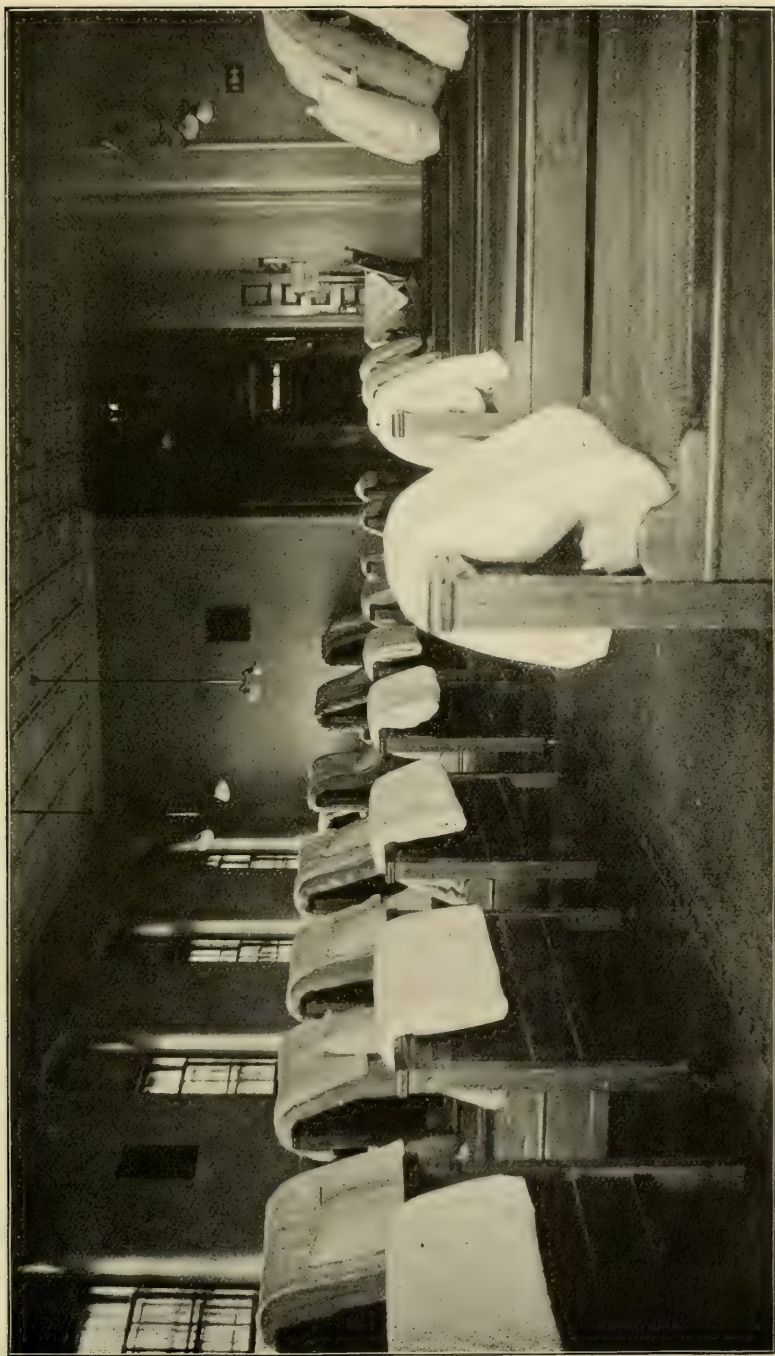
ST. LAWRENCE STATE HOSPITAL.—A DINING ROOM FOR WORKING PATIENTS.



ST. LAWRENCE STATE HOSPITAL.—A HOSPITAL WARD FOR WOMEN.



ST. LAWRENCE STATE HOSPITAL.—DORMITORY.



ST. LAWRENCE STATE HOSPITAL.—DORMITORY.

In addition to the list we have mentioned, the matter of mechanical stokers and feed-water heater must be considered, but we believe it is the intention of the Commission to make an appropriation for this purpose as soon as the report of the State Architect is received. The installation of stokers and feed-water heater will cost approximately \$11,700.

Spray baths and hydro-therapeutic equipment are also needed, but the Commission last summer tentatively set aside the sum of \$4,000 for this purpose. I have lately given some little attention to this, but expect during the fall to look up the matter personally when in New York city.

ACKNOWLEDGMENTS

We are again under obligations to the clergy of Ogdensburg for holding service each Sabbath afternoon, and for visiting the sick whenever called upon. To the members of the choir under the direction of Mrs. Waterman we would return our thanks for the attractive music they have rendered.

To the press of northern New York we would return thanks for providing us with copies of their newspapers for use upon our wards. The list of their contributions is as follows: Adirondack News, Antwerp Gazette, Baldwinsville Gazette, Canton Commercial Advertiser, Carthage Republican, Chateaugay Record, Essex County Republican, Fayetteville Weekly Recorder, Franklin Gazette, Glens Falls Daily Times, Glens Falls Morning Star, Gouverneur Free Press, Jefferson County Journal, Lakeside Press, Lowville Journal and Republican, Malone Palladium, Mexico Independent, Watertown Advocate, Ogdensburg Advance, Oswego Daily Times, Potsdam Courier and Freeman, Potsdam Recorder, Elizabethtown Post, Fort Covington Sun, Theresa Weekly Gleaner, Malone Farmer, Manlius Eagle, Northern Tribune, Sandy Creek News, Syracuse Sunday Times, Tully News, St. Lawrence Herald, St. Lawrence Plaindealer, Ticonderoga Sentinel, Watertown Herald, Syracuse Post-Standard (semi-weekly), Oswego Daily Palladium, Northern Christian Advocate, Watertown Re-Union, Richville Recorder and the Christian Herald.

I beg at this time to thank the publishers of the New York Medical Journal for furnishing the medical staff of this hospital gratuitously a copy of their journal.

To Dr. Madill, of the consulting staff, we are indebted for advice and aid rendered on several occasions.

To all the friends of the institution who have contributed reading matter, money for Christmas presents, and who have had an interest generally in the welfare of our household, we beg to record our appreciation.

Each year sees some addition to our zoo, and we now return thanks to General N. M. Curtis and to the Soldiers' Home at Togus, Maine, for the gift of two deer; while to W. H. Rose, of Ogdensburg, we are indebted for a large alligator.

It is indeed a pleasure as well as a privilege at this time to make personal acknowledgment to your board of the gratitude I feel for the advice, sympathy and encouragement you have always held out to me with unstinted hands.

Very respectfully submitted.

WILLIAM MABON

STEWARD'S REPORT

To the Medical Superintendent

The report of the farm and garden products, live stock on hand, the classification for maintenance, steward's sales and articles manufactured and repaired for the year ending September 30, 1901, is herewith respectfully submitted.

W. C. HALL

Steward

FARM REPORT

Apples, 454 bushels, at 50 cents.....	\$227 00
Beef, 2,746 pounds, at 7 cents.....	192 22
Boar pigs sold, 5.....	21 50
Broilers, 25 pairs, at 50 cents.....	12 50
Butter, 1,175 pounds.....	231 40
Calves sold, 78.....	123 50
Chickens, dressed, 348 pounds, at 11 cents.....	38 28
Corn fodder, 120 tons, at \$3.....	360 00
Ducks, dressed, 404 pounds, at 11 cents.....	44 44
Eggs, 1,697 dozen, at 17 cents.....	288 49
Ensilage, 1,000 tons, at \$4.....	4,000 00
Hay, 305 tons, at \$12.....	3,660 00
Hides, cow, sold, 9.....	36 94
Hides, horse, sold, 1.....	1 75
Hides, deacon, sold, 17.....	8 30
Hides, calf, sold, 1.....	1 00
Lard, 308 pounds, at 10 cents.....	30 80
Milk, 71,029 gallons, at 10 cents.....	7,102 90
Milk, sold, 77,438 pounds.....	551 38
Oats, 2,000 bushels, at 40 cents.....	800 00
Pig, sold, 1.....	1 75
Pork, 15,982 pounds, at 7 cents.....	1,118 74
Potatoes, 3,000 bushels, at 50 cents.....	1,500 00
Rye, 400 bushels, at 60 cents.....	240 00
Straw, tons, 80, at \$6.....	480 00

\$21,072 89

GARDEN

Asparagus, 464 bunches, at 10 cents.....	\$46 40
Beans, string, 356 bushels, at \$1.....	356 00
Beans, Lima, 13 bushels, at \$1.....	13 00
Beans, field, 30 bushels, at \$2.50.....	75 00
Beet greens, 229 bunches, at 5 cents.....	11 45
Beets, 498 bushels, at 40 cents.....	196 20
Blackberries, 28 quarts, at 8 cents.....	2 24
Cabbage, 23,608 heads, at 4 cents.....	944 32
Cauliflower, 2,246 heads, at 4 cents.....	89 84
Carrots, 736 bushels, at 30 cents.....	220 80
Celery, 5,340 heads, at 2 cents.....	106 80
Corn, sweet, 2,903 dozen, at 10 cents.....	290 30
Corn, pop, 24 bushels, at \$1.....	24 00
Cress, 8 bunches, at 5 cents.....	40
Cucumbers, 132 bushels, at \$1.....	132 00
Cucumbers, small, 808 units, at 25 cents.....	2 02
Egg plant, 5 bushels, at 50 cents.....	2 50
Horse-radish, 9 gallons, at 80 cents.....	7 20
Lettuce, 203 heads, at 2 cents.....	4 06
Lettuce, 182 bushels, at 75 cents.....	136 50
Melons, musk, 760, at 5 cents.....	38 00
Melons, water, 1,530, at 6 cents.....	91 80
Mint, 15 bunches, at 5 cents.....	75
Onions, 12,715 bunches, at 5 cents.....	635 75
Onions, 481 bushels, at 80 cents.....	384 80
Parsnips, 180 bushels, at 50 cents.....	90 00
Parsley, 247 bunches, at 5 cents.....	12 35
Peas, green, 84 bushels, at \$1.....	84 00
Peppers, 18 dozen, at 10 cents.....	1 80
Pickles, 12 barrels, at \$5.....	60 00
Pumpkins, 11, at 20 cents.....	2 20
Radishes, 11,633 bunches, at 2½ cents.....	290 83
Rhubarb, 1,802 bunches, at 5 cents.....	90 10
Salsify, 79 bushels, at 40 cents.....	31 60
Squash, 79 bushels, at 60 cents.....	47 40
Sage, 150 pounds, at 10 cents.....	15 00

Savory, 170 pounds, at 10 cents.....	\$17 00
Tomatoes, 266 bushels, at 50 cents.....	133 00
Turnips, 451 bushels, at 40 cents.....	180 40
Strawberries, 1,795 quarts, at 8 cents.....	143 60
	<hr/>
	\$5,011 41
	<hr/> <hr/>

SUMMARY

Farm products	\$21,072 89	
Garden products	5,011 41	
	<hr/>	\$26,084 30
Debit:		
Amount charged farm and grounds as per treasurer's reports.....	\$6,346 24	
Amount of farm wages.....	3,125 99	
Value of articles of produce that have been used as foods for cows, hogs, sheep, and fowls.....	8,655 50	
	<hr/>	18,127 73
Net profits		<hr/> \$7,956 57 <hr/> <hr/>

Note.—From the amount charged farm and grounds per treasurer's report, viz.: \$6,346.24, the sum of \$1,017.25 should be deducted, it being the amount used for the care of grounds, lawns and administration purposes, and would increase the net profit to farm and garden to \$8,973.82.

LIVE STOCK AND POULTRY ON HAND

Bulls	2
Calves ..	29
Colts	1
Cows	148
Hens and chickens.....	450
Horses ..	36
Hogs	49
Heifers	33
Pigs ..	40
Shoats ..	71
	<hr/> <hr/>

ARTICLES MANUFACTURED IN WORK SHOP

Awnings	4
Breeching straps	6
Bridles	2
Brooms	1,477
Broom handles, long	75
Brush brooms	298
Brushes, stove	13
Brushes, long handled, scrub.....	23
Brushes, hand	10
Brushes, scrub	12
Brushes, cow	24
Brushes, floor polishers	156
Buttons	120
Carpet, rag, yards	619
Card boxes	5
Canvas bags	2
Canvas for reaper	1
Check straps	4
Cushions	24
Felt back pads	3
Felt collar pads	6
Footstools	13
Halter strap	1
Hame straps	38
Head pieces for bridle	4
Lazy straps	4
Laundry bags	55
Leather back pads	4
Leather center neckyoke	2
Leather halters	4
Lines, pairs	2
Mattresses	470
Mattress ticks	365
Mattresses, strong	19
Mattress tufts	30

Mats, braided	8
Pillows, feather	102
Pillows, hair	5
Pillow ticks	92
Pole straps	12
Pump valves	3
Rugs, carpet, rag.....	144
Side straps	3
Strong blankets	42
Skate straps	2
Shoes, men's, pairs.....	568
Shoes, women's, pairs	359
Slippers, men's, pairs	497
Tugs	2

ARTICLES MADE IN SEWING ROOM

Aprons, white	1,071
Aprons, cooks'	222
Aprons, attendants', cut.....	839
Aprons, attendants', made	3
Bath robes	8
Barbers' aprons	7
Bathing suits	2
Bibs	90
Bloomer suits	3
Cushions	23
Coffee sacks	12
Chemises	416
Caps, cooks'	48
Caps, domestic	84
Caps, nurses'	273
Corset covers	12
Curtains, denim, pairs.....	2
Curtains, muslin, pairs.....	16
Curtains, red calico	1

Curtains, scrim, pairs.....	34
Combination suits	17
Clothes bags	2
Carpet rags, pounds	1,858
Couch covers	2
Camisoles	8
Carpets, sewed	4
Dresses, seersucker	721
Dresses, percale	513
Dresses, cashmere	53
Dresses, strong	230
Dress skirts	97
Dress waists	46
Drawers, cotton	407
Drawers, cotton flannel	29
Dish towels	606
Dish towels, old linen	1,944
Dresser covers	7
Dusters	6
Handkerchiefs	637
Holders, iron, coffeepot, etc.....	126
Kitchen aprons	40
Laundry bags	2
Lawn curtains	23
Lawn curtains, repaired.....	24
Mattress ticks	70
Mattress protectors	378
Mittens, strong, pairs.....	11
Mittens, bakers', pairs.....	27
Neckties	726
Napkins, table	215
Napkins, sanitary	138
Night dresses, bleached	142
Night dresses, brown	1,229
Night dresses, strong	34
Night shirts	1,193

Pillow cases	2,232
Protection sheets	8
Protection sheets, repaired	12
Rugs, bound	71
Sausage bags	12
Sheets	2,271
Shirts, fine	257
Shirts, cheviot	992
Shirts, cotton	100
Shrouds	104
Shirt waists, outing	1
Shirt waists	6
Silk and wool waists	10
Skirts, colored	331
Skirts, cotton	106
Skirts, bleached cotton	4
Skirts, flannel	11
Stand spreads	28
Strong union suits	6
Strong dress skirts	49
Strong dress waists	29
Sunbonnets	5
Surgical gowns	3
Surg jackets	2
Tablecloths	338
Ticking suspenders	189
Towels, roller	281
Towels, bath	1,434
Towels, glass	72
Tray cloths	28
Tags sewed on	8,894
Underwaists	2
Window shades	225
Worsted dress skirts	2

ARTICLES MADE IN TAILOR SHOP

Coats	406
Pants	590
Vests	349
Overcoats	36
Caps	54
White coats	90
White pants	60
Overalls	71
Suspenders, pairs	80
Necktie backs	800

ARTICLES MENDED

Garments repaired in sewing rooms	49,655
Hose repaired in sewing room, pairs	5,461
Garments repaired in tailor shop	8,763
Articles repaired in workshop	2,341

STEWARD'S SALES

October	\$21 53
November	27 30
December	82 51
January	11 00
February	13 10
March	24 50
April	59 75
May	118 98
June	112 84
July	365 64
August	235 80
September	102 95

\$1,175 80

MANUFACTURING DEPARTMENT SALES

October:

Butter	\$1,755 00	
Bread pans	29 25	
Uniform material	69 99	
Interest	8 65	
	<hr/>	\$1,862 89

November:

Butter	\$1,615 20	
Uniform material	38 00	
Interest	6 19	
	<hr/>	1,659 39

December:

Butter	\$1,713 30	
Uniform material	50 26	
Interest	6 66	
	<hr/>	1,770 22

January:

Butter	\$332 16	
Uniform material	50 06	
Interest	9 02	
	<hr/>	1,391 24

February:

Butter	\$2,372 82	
Uniform material	38 06	
Interest	10 13	
	<hr/>	2,421 01

March:

Butter	\$1,827 19	
Uniform material	48 34	
Interest	14 08	
	<hr/>	1,889 61

April:

Butter	\$1,235 31	
Uniform material	57 26	
Interest	13 98	
	<hr/>	1,306 55

May:

Butter	\$219 30	
Uniform material	29 76	
Drugs	8 40	
Interest	17 16	
	<hr/>	\$274 62

June:

Butter	\$2,615 48	
Uniform material	58 46	
Interest	13 54	
	<hr/>	2,687 48

July:

Butter	\$1,462 65	
Uniform material	57 37	
Interest	15 80	
	<hr/>	1,535 82

August:

Butter	\$1,423 63	
Uniform material	44 87	
Interest	11 90	
	<hr/>	1,480 40

September:

Butter	\$1,425 42	
Uniform material	66 55	
Interest	12 31	
	<hr/>	1,504 28

\$19,783 51

Estimated value of farm and garden products....	\$26,084 30
Estimated value of articles manufactured in work- shop, including cost of material	4,520 33
Estimated value of articles manufactured in tailor shop, including cost of material.....	2,942 02
Estimated value of articles manufactured in sewing room, including cost of material.....	8,521 47

SUMMARY OF VOUCHERS AUDITED FOR THE YEAR

Officers' salaries	\$17,948 22
Wages	93,063 55
Provisions and stores.....	87,534 02
Ordinary repairs	7,387 61
Farm and grounds	6,346 24
Clothing	11,100 29
Furniture and bedding	4,257 33
Books and stationery	1,505 01
Fuel and light	39,848 59
Medical supplies	2,374 55
Miscellaneous expenses	7,981 60
Transportation of patients	4,328 21
	<hr/>
	\$283,675 22
	<hr/> <hr/>

BI-MONTHLY AUDIT OF VOUCHERS, WITH CLASSIFICATION, YEAR ENDING SEPTEMBER 30, 1901

CLASSIFICATION	Total					
	October and November	December and January	February and March	April and May	June and July	August and September
Officers' salaries.....	\$2,881 14	\$2,889 30	\$2,944 28	\$3,042 28	\$3,042 28	\$3,148 94
Wages.....	15,714 51	15,602 48	15,388 26	15,540 85	15,473 16	15,344 29
Provisions and stores.....	14,348 46	14,263 85	14,951 44	15,272 63	15,350 57	13,338 77
Ordinary repairs.....	820 75	934 56	1,294 47	1,219 03	1,485 10	1,587 92
Farm and grounds.....	501 47	1,169 81	1,387 45	1,748 08	626 53	917 78
Clothing.....	2,601 42	2,301 68	1,676 98	1,433 98	1,868 55	1,215 19
Furniture and bedding.....	492 38	793 40	718 03	899 80	715 40	631 82
Books and stationery.....	361 44	242 36	218 75	279 01	216 96	184 14
Fuel and light.....	9,377 84	8,605 31	8,783 11	6,509 40	3,921 47	2,640 99
Medical supplies.....	275 17	399 93	332 62	341 67	319 54	699 09
Miscellaneous expenses.....	1,218 08	1,663 24	1,320 26	1,280 18	1,401 16	1,169 82
Transportation of patients.....	578 85	681 21	717 24	816 03	740 31	734 57
Total.....	\$49,171 91	\$49,543 13	\$49,742 89	\$48,382 94	\$45,161 03	\$41,673 32
						\$283,675 22

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900	810	796	1,606
Admitted during year ending September 30, 1901:			
On original commitments:			
From residences.....	166	119	285
By transfers from county houses ...	2	2	4
By transfers from other institutions for insane.....	37	.....	37
Total number under treatment during year.....	1,015	917	1,932
Daily average population.....	847.74	797.86	1,645.6
Capacity of institution.....	892	750	1,642
Discharged during the year:			
As recovered.....	44	43	87
As improved.....	13	16	29
As unimproved	8	12	20
As not insane.....	.....	.....	.....
Died	67	58	125
Whole number discharged during the year	132	129	261
Remaining October 1, 1901	883	788	1,671

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	Dec. 9, 1890
Total acreage of grounds and buildings	990
Value of real estate, including buildings.....	\$2,500,500
Value of personal property.....	138,200
Acreage under cultivation	421

Receipts during year, maintenance fund :

Balance on hand October 1, 1900.....	\$395 37
From State Treasury for maintenance on estimates 1 to 12 inclusive..	281,220 00
From private patients.....	1,875 41
From reimbursing patients.....	8,321 64
From all other sources	4,891 74

Total receipts for maintenance.....	\$296,704 16
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Total receipts from State Commission in Lunacy for extraordinary improvements, including in- terest received.....	\$23,227 95
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Total receipts from manufacturing fund.....	\$20,408 52
Total receipts from clothing manufacturing fund..	3,350 33

Disbursements during year for maintenance :

Estimate No. 1. For officers' salaries.....	\$17,948 22
Estimate No. 2. For wages.....	93,063 55
Estimate No. 3. For provisions and stores.....	87,466 03
Estimate No. 4. For ordinary repairs... ..	7,051 19
Estimate No. 5. For farm and grounds.....	6,274 64
Estimate No. 6. For clothing	11,086 52
Estimate No. 7. For furniture and bedding....	4,248 56
Estimate No. 8. For books and stationery	1,499 21
Estimate No. 9. For fuel and light.....	39,844 70
Estimate No. 10. For medical supplies.....	2,316 13
Estimate No. 11. For miscellaneous expenses....	8,548 31
Estimate No. 12. For transportation	4,328 16

Total disbursements, estimates 1 to 12, inclusive.	\$283,675 22
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Table No. 2—(Concluded)

Paid Comptroller receipts from miscellaneous sources, maintenance account.....	\$10,704 79
Total disbursements during year for clothing manufacturing fund	3,350 33
Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	23,214 38
Remitted to State Treasurer, sundry receipts for year, special account	13 57
Total disbursements during year, manufacturing fund.....	18,410 80
<hr/> <hr/>	
Balances October 1, 1901 :	
General maintenance fund.....	\$2,324 15
Manufacturing fund	1,997 72
<hr/> <hr/>	
Weekly per capita cost on daily average number of patients, estimates 1 to 12, inclusive.....	\$3.312
<hr/> <hr/>	
Maximum rate of wages paid attendants :	
Men	\$31 00
Women	28 00
<hr/> <hr/>	
Minimum rate of wages paid attendants :	
Men	\$20 00
Women	14 00
<hr/> <hr/>	
Proportion of day attendants to average daily population.	1 to 8.4
Proportion of night attendants to average daily population.....	1 to 53.09
Percentage of daily patient population engaged in some kind of useful occupation	65.6
Estimated value of farm and garden products during year.....	\$26,084 30
Estimated value of articles made or manufactured by patients during year.....	15,983 82
<hr/> <hr/>	

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.).....	18	16	34	7	7	14	12
Mental strain, worry and overwork (not in- cluded in above)....	4	6	10	2	3	5	....
Religious excitement...	1	.....	1	1	.....	1	....
Love affairs (including seduction)	2	1	3	.....	.....	.....	....
Physical:							
Intemperance	26	2	28	6	1	7	3
Sexual excess	1	.....	1	.....	.....	.....	....
Venereal diseases	13	.....	13	1	.....	1	2
Masturbation	2	1	3	.....	1	1	2
Sunstroke	4	.....	4	2	.....	2	2
Accident or injury ...	4	2	6	2	1	3	....
Parturition and puer- perium .....	.....	4	4	.....	2	2	....
Change of life .....	.....	10	10	.....	2	2	1
Epilepsy	5	6	11	2	1	3	....
Diseases of skull and brain	2	3	5	1	1	2	....
Old age	10	4	14	4	2	6	3
Exophthalmic goitre...	.....	1	1	.....	.....	.....	1
Epidemic influenza	2	3	5	2	2	4	....
Abuse of drugs	5	.....	5	2	.....	2	1
All other bodily disor- ders and ill health ...	14	17	31	4	10	14	2
Heredity	44	19	63	44	19	63	....
Congenital defect	1	2	3	.....	1	1	....
Unascertained	47	24	71	5	10	15	35
Total	205	121	326	85	63	148	63

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since December 9, 1890

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious.....	.....	.....	.....	1	.....	1
Mania, acute.....	52	40	1	703	391	49
Mania, recurrent.....	4	.....	1	53	19	5
Mania, chronic.....	44	.....	8	481	5	96
Melancholia, acute.....	81	44	10	648	312	76
Melancholia, simple.....	.....	.....	.....	128	51	6
Melancholia, chronic.....	28	1	15	301	6	84
Alternating (circular) insanity ..	.....	.....	1	14	.....	1
Paranoia.....	11	.....	1	73	.....	2
General paralysis.....	15	.....	10	202	1	161
Dementia, primary.....	4	1	.....	64	9	21
Dementia, terminal.....	72	.....	68	1,241	.....	496
Epilepsy with insanity.....	7	.....	8	182	4	75
Imbecility with maniacal attacks.	8	1	2	103	1	9
Idiocy.....	.....	.....	.....	30	.....	3
Not insane*.....	.....	.....	.....	42	.....	1
Total.....	326	87	125	4,266	799	1,086

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6
Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since December 9, 1890

	YEAR ENDING SEPTEMBER 30, 1901						SINCE DECEMBER 9, 1890					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	19	11	30	.....	.....	.....	191	109	300	7	1	8
One to three months	11	11	22	6	5	11	108	93	201	76	63	139
Three to six months	6	10	16	19	10	29	55	65	120	163	127	290
Six to nine months	5	4	9	8	12	20	32	28	60	84	65	149
Nine months to one year	2	1	3	1	7	8	12	6	18	46	32	78
One year to eighteen months ..	1	2	3	5	4	9	17	19	36	45	27	72
Eighteen months to two years ..	.....	.....	.....	1	3	4	7	3	10	8	15	23
Two to three years .....	.....	2	2	2	1	3	6	12	18	15	14	29
Three to four years .....	.....	.....	.....	1	1	2	.....	1	1	4	2	6
Four to five years .....	.....	.....	.....	.....	.....	.....	1	3	4	3	1	4
Five to ten years .....	.....	2	2	1	.....	1	3	2	5	1	.....	1
Ten to twenty years .....	.....	.....	.....	.....	.....	.....	2	3	5	.....	.....	.....
Unascertained .....	.....	.....	.....	.....	.....	.....	18	3	21	.....	.....	.....
Total	44	43	87	44	43	87	452	347	799	452	347	799

TABLE No. 7

Showing the causes of death of patients who died during the current year and since December 9, 1890

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases:						
Typhoid fever				14	8	22
Mumps				1	3	4
Influenza		2	2	4	13	17
Erysipelas	3		3	13	14	27
Septicemia and pyemia				4		4
Dysentery	3	5	8	16	20	36
Syphilis	2	2	4	2	4	6
Tuberculosis	8	17	25	48	53	101
Constitutional diseases:						
Rheumatism (or rheumatic affections)	1	1	2	1	1	2
Gout					1	1
Diabetes mellitus and dia- betes insipidus					2	2
Scurvy, purpura and haemophilia				1	3	4
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and oesophagus				1	3	4
Diseases of the stomach		2	2	24	28	52
Diseases of the intestines ..		3	3			
Diseases of the liver	2		2	7	2	1
Diseases of the pancreas ..				1		
Diseases of the peritoneum ..				3	4	7
Diseases of the respiratory sys- tem:						
Diseases of the lungs	3	6	9	70	41	111
Diseases of the pleura.						
Diseases of the circulatory sys- tem:						
Diseases of the pericardium ..				2		2
Diseases of the heart	10	1	11	60	32	92
Arterio-sclerosis	1		1	1		1
Aneurism				2		2

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
Diseases of the blood and ductless glands:						
Anemia, pernicious anemia and leukemia.....				1		1
Hodgkin's disease, Addi- son's disease and myx- cedema.....		1	1		1	1
Exophthalmic goitre.....					1	1
Diseases of the genito-uri- nary system ...	5	4	9	60	61	121
Diseases of the nervous system:						
Diseases of the spinal cord..		1	1		1	1
Diseases of the meninges...				1	2	3
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions)...	5	5	10	65	49	114
Epilepsy	2	1	3	20	18	38
Mental diseases:						
Exhaustion of acute men- tal disease	3	4	7	18	28	46
Exhaustion of chronic mental disease.....						
General paralysis of the insane	10		10	127	20	147
Debility of old age	7		7	32	31	63
Accident				1	5	6
Suicide	1		1	8	1	9
Malignant new growths or can- cer	1	3	4	11	17	28
Total	67	58	125	619	467	1,086

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since December 9, 1890

	YEAR ENDING SEPT. 30, 1901			SINCE DEC. 9, 1890		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	38	22	60	271	198	469
Maternal branch	24	20	44	268	252	520
Paternal and maternal branches.....	2	8	10	41	48	89
Collateral branches	21	13	34	225	179	404
No hereditary tendency ..	73	42	115	737	673	1,410
Unascertained.....	47	16	63	791	583	1,374
Total	205	121	326	2,333	1,933	4,266

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since December 9, 1890

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
Single	93	39	132	1,137	731	1,868
Married	85	65	150	947	878	1,825
Widowed	17	14	31	194	288	482
Divorced	5	3	8	13	17	30
Unascertained	5	.....	5	42	19	61
Total	205	121	326	2,333	1,933	4,266

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since December 9, 1890

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
Collegiate	15	1	16	51	12	63
Academic	13	9	22	124	145	269
Common school	107	89	196	1,243	1,100	2,343
Read and write	23	9	32	80	52	132
Read only	4	5	9	119	109	228
No education	21	5	26	176	180	356
Unascertained	22	3	25	540	335	875
Total	205	121	326	2,333	1,933	4,266

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since December 9, 1890

	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total
Under one month	4	3	7	11	4	15
One to three months	8	6	14	3	3	6
Three to six months	6	5	11	9	8	17
Six to nine months	7	4	11	2	3	5
Nine months to one year	2	1	3	8	2	10
One year to eighteen months	8	6	14	2	8	10
Eighteen months to two years	2	.....	2	2	2	4
Two to three years	5	1	6	6	3	9
Three to four years	3	1	4	3	2	5
Four to six years	4	7	11	9	4	13
Six to ten years	5	7	12	8	16	24
Ten to twenty years	8	8	16	3	3	6
Twenty years and over	5	9	14	1	.....	1
Not insane*
Unascertained
Total	67	58	125	67	58	125
Average duration of insane life (giving years and tenths)	8.12	11.04	9.73

TABLE No. 12

Showing ages of those admitted during the current year and since
December 9, 1890

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....				6	5	11
From 15 to 20 years.....	3	5	8	66	60	126
From 20 to 25 years.....	13	2	15	191	122	313
From 25 to 30 years.....	15	13	28	208	189	397
From 30 to 35 years.	20	18	38	126	100	226
From 35 to 40 years.....	28	16	44	448	354	802
From 40 to 50 years.....	61	25	86	505	444	949
From 50 to 60 years.	22	20	42	359	327	686
From 60 to 70 years.....	30	13	43	239	198	437
From 70 to 80 years.....	12	7	19	141	94	235
From 80 to 90 years.....	1	2	3	42	19	61
Unascertained.....				2	21	23
Total	205	121	326	2,333	1,933	4,266

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since December 9, 1890

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years.....	1	1	2	21	22	43
From 20 to 30 years.....	14	14	28	133	92	225
From 30 to 40 years.....	12	16	28	100	99	199
From 40 to 50 years.....	6	5	11	99	72	171
From 50 to 60 years.....	7	5	12	67	37	104
From 60 to 70 years.....	4	1	5	28	19	47
From 70 to 80 years.....	.....	1	1	4	6	10
Total	44	43	87	452	347	799

TABLE No. 14

Showing ages of patients who died during the current year and since
December 9, 1890

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....	.....	.....	.....	.....	1	1
From 15 to 20 years.....	1	.....	1	4	2	6
From 20 to 25 years.....	2	.....	2	12	13	25
From 25 to 30 years.....	1	1	2	14	22	36
From 30 to 35 years.	5	5	10	49	30	79
From 35 to 40 years.....	6	4	10	53	32	85
From 40 to 50 years.....	11	16	27	122	92	214
From 50 to 60 years.....	9	13	22	113	93	206
From 60 to 70 years.....	16	10	26	105	78	183
From 70 to 80 years.....	11	7	18	105	69	174
From 80 to 90 years.....	5	2	7	42	35	77
Total	67	58	125	619	467	1,086

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month	34	19	53
One to three months	32	13	45
Three to six months	26	16	42
Six to nine months	21	11	32
Nine months to one year	10	2	12
One year to eighteen months	18	7	25
Eighteen months to two years	2	2	4
Two to three years	10	9	19
Three to four years	6	4	10
Four to five years	5	2	7
Five to ten years	21	14	35
Ten to fifteen years	8	6	14
Fifteen to twenty years	6	2	8
Twenty to thirty years	2	3	5
Thirty years and upwards	1	1	2
Unascertained	3	10	13
Total	205	121	326

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.....	8	16	24
One to three months.....	20	37	57
Three to six months.....	93	42	135
Six to nine months.....	113	108	221
Nine months to one year ...	43	24	67
One year to eighteen months.....	18	14	32
Eighteen months to two years.....	15	18	33
Two to three years.....	59	34	93
Three to four years.....	79	33	112
Four to five years.....	33	37	70
Five to ten years.....	402	425	827
Total	883	788	1,671

TABLE No. 17

Showing the occupation of those admitted during the current year and since December 9, 1890

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
Professional: Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, etc.....	9	1	10	64	3	67
Commercial: Bankers, merchants, ac- countants, clerks, sales- men, shopkeepers, shop- men, stenographers, typewriters, etc.....	20	1	21	213	11	224
Agricultural and pas- toral: Farmers, gardeners, herds- men, etc.....	51	.....	51	560	4	564
Mechanics at out-door vocations: Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....	28	.....	28	344	.....	344
Mechanics, etc., at sedentary vocations: Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	18	.....	18	214	4	218
Domestic service: Waiters, cooks, servants, etc.....	.....	19	19	39	568	607
Educational and high- er domestic duties: Governesses, teachers students, housekeepers, nurses, etc.....	7	76	83	28	992	1,020

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
Commercial: Shopkeepers, saleswomen, stenographers, typewrit- ers, etc.....	9	1	10	20	8	28
Employed in seden- tary occupations: Tailoresses, seamstresses, bookbinders, factory workers, etc.....		10	10	7	104	111
Miners, seamen, etc.....				12		12
Prostitutes.....		1	1		8	8
Laborers.....	50		50	652		652
No occupation.....	10	11	21	114	160	274
Unascertained.....	3	1	4	66	71	137
Total.....	205	121	326	2,333	1,933	4,266

TABLE No. 18

Showing the nativity of patients admitted during the current year and since December 9, 1890

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE DECEMBER 9, 1890		
	Men	Women	Total	Men	Women	Total
United States.....	145	87	232	1,559	1,193	2,752
Ireland.....	13	13	26	223	289	512
Germany.....	12	3	15	126	101	227
England.....	2	5	7	56	42	98
Russia.....	1	.....	1	18	5	23
France.....	1	.....	1	9	3	12
Italy.....	1	.....	1	13	3	16
Sweden.....	1	.....	1	6	1	7
China.....	1	.....	1	3	.....	3
Canada.....	17	9	26	157	171	328
Scotland.....	1	.....	1	10	9	19
Wales.....	.....	.....	.....	4	3	7
Poland.....	.....	.....	.....	7	7	14
Austria-Hungary.....	1	.....	1	5	3	8
Bavaria.....	.....	.....	.....	2	.....	2
Belgium.....	.....	.....	.....	2	.....	2
Cuba.....	.....	.....	.....	3	.....	3
Norway.....	1	.....	1	2	.....	2
Spain.....	.....	.....	.....	1	.....	1
Switzerland.....	1	.....	1	7	4	11
West Indies.....	.....	.....	.....	2	1	3
Born on shipboard.....	.....	.....	.....	1	1	2
Greece.....	.....	.....	.....	1	.....	1
Holland.....	.....	.....	.....	1	.....	1
Unascertained.....	7	4	11	115	97	212
Total.....	205	121	326	2,333	1,933	4,266

Of the total number admitted since December 9, 1890, the parents of 41.37 per cent were both of foreign birth.

In 5.27 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 3.21 per cent the parentage on the maternal side was foreign while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany.....	6	.....	6
Allegany.....	.....	.....	.....
Broome.....	1	.....	1
Cattaraugus.....	.....	.....	.....
Cayuga.....	.....	.....	.....
Chautauqua.....	.....	.....	.....
Chemung.....	.....	.....	.....
Chenango.....	1	.....	1
Clinton.....	25	.....	25
Columbia.....	.....	.....	.....
Cortland.....	3	.....	3
Delaware.....	.....	.....	.....
Dutchess.....	.....	.....	.....
Erie.....	.....	.....	.....
Essex.....	4	.....	4
Franklin.....	21	.....	21
Fulton.....	.....	.....	.....
Genesee.....	.....	.....	.....
Greene.....	.....	.....	.....
Hamilton.....	1	.....	1
Herkimer.....	3	.....	3
Jefferson.....	39	.....	39
Kings.....	.....	.....	.....
Lewis.....	11	.....	11
Livingston.....	.....	.....	.....
Madison.....	3	.....	3
Monroe.....	.....	.....	.....
Montgomery.....	1	.....	1
Nassau.....	.....	.....	.....
New York.....	8	.....	8
Niagara.....	.....	.....	.....
Oneida.....	5	.....	5
Onondaga.....	86	.....	86
Ontario.....	.....	.....	.....
Orange.....	.....	.....	.....
Orleans.....	.....	.....	.....
Oswego.....	32	.....	32
Otsego.....	1	.....	1
Putnam.....	.....	.....	.....
Queens.....	1	.....	1
Rensselaer.....	1	.....	1
Richmond.....	.....	.....	.....
Rockland.....	.....	.....	.....
St Lawrence.....	68	3	71

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
Saratoga	1	.....	1
Schenectady
Schoharie.....
Schuyler.....
Seneca
Steuben
Suffolk
Sullivan
Tioga
Tompkins
Ulster.....
Warren
Washington.....	1	.....	1
Wayne
Westchester
Wyoming.....
Yates
Soldiers' Home.....
Total.....	323	3	326

TABLE No. 20

Showing the residence by counties and classification of patients remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany	32	16	47	.....	.....	.....
Allegany .....	.....	.....	.....	.....	.....	.....
Broome	2	.....	2	.....	.....	.....
Cattaraugus .....	.....	.....	.....	.....	.....	.....
Cayuga .....	.....	.....	.....	.....	.....	.....
Chautauqua .....	.....	.....	.....	.....	.....	.....
Chemung .....	.....	.....	.....	.....	.....	.....
Chenango	1	.....	1	.....	.....	.....
Clinton	42	48	90	.....	.....	.....
Columbia	4	4	8	.....	.....	.....
Cortland	3	.....	3	.....	.....	.....
Delaware .....	.....	.....	.....	.....	.....	.....
Dutchess	4	8	12	.....	.....	.....
Erie	2	.....	2	.....	.....	.....
Essex	19	17	36	.....	.....	.....
Franklin	35	34	69	.....	.....	.....
Fulton	4	1	5	.....	.....	.....
Genesee .....	.....	.....	.....	.....	.....	.....
Greene .....	.....	.....	.....	.....	.....	.....
Hamilton	1	.....	1	.....	.....	.....
Herkimer	11	1	12	.....	.....	.....
Jefferson	82	85	167	.....	.....	.....
Kings	3	2	5	.....	.....	.....
Lewis	38	25	63	.....	.....	.....
Livingston	2	.....	2	.....	.....	.....
Madison	3	3	6	.....	.....	.....
Monroe	20	20	40	.....	.....	.....
Montgomery	3	3	6	.....	.....	.....
New York	116	29	145	.....	.....	.....
Niagara .....	.....	.....	.....	.....	.....	.....
Oneida	12	17	29	.....	.....	.....
Onondaga	146	183	329	1	1	2
Ontario .....	.....	.....	.....	.....	.....	.....
Orange .....	.....	.....	.....	.....	.....	.....
Orleans .....	.....	1	1	.....	.....	.....
Oswego	81	95	176	.....	.....	.....
Otsego	1	.....	1	.....	.....	.....
Putnam .....	.....	.....	.....	.....	.....	.....
Queens	7	9	16	.....	.....	.....
Rensselaer	22	19	41	.....	.....	.....
Richmond	3	.....	3	.....	.....	.....

Table No. 20—(Concluded)

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Rockland.....		2	2			
St Lawrence.....	99	118	217	3	2	5
Saratoga.....	17	3	20			
Schenectady.....	2	1	3			
Schoharie.....						
Schuyler.....						
Seneca.....						
Steuben.....	1		1			
Suffolk.....	1	1	2			
Sullivan.....						
Tioga.....						
Tompkins.....						
Ulster.....	5	1	6			
Warren.....	10	4	14			
Washington.....	4	6	10			
Wayne.....						
Westchester.....	13	8	21			
Wyoming.....						
Yates.....	1		1			
Unascertained.....	27	22	49			
Total.....	879	785	1,664	4	3	7

ELEVENTH ANNUAL REPORT
OF THE
MANAGERS
OF THE
ROCHESTER STATE HOSPITAL
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

OFFICERS

BOARD OF MANAGERS

FREDERICK COOK	Rochester, N. Y.
WILLIAM MILLER.....	Rochester, N. Y.
GEORGE RAINES	Rochester, N. Y.
CHAUNCEY G. STARKWEATHER.....	Ridgeland, N. Y.
JANE E. ROCHESTER.....	Rochester, N. Y.
PERLEYETTE H. GRAHAM.....	Rochester, N. Y.
THOMAS A. O'HARE, M. D.....	Rochester, N. Y.

OFFICERS OF THE BOARD

FREDERICK COOK	President
EUGENE HOWARD	Secretary
F. P. ALLEN	Treasurer

RESIDENT OFFICERS

EUGENE H. HOWARD, M. D.....	Superintendent
EZRA B. POTTER, M. D.....	First Assistant Physician
CHARLES T. LA MOURE, M. D.....	Assistant Physician
EVALINE P. BALLINTINE, M. D....	Woman Asst. Physician
HOWARD A. LA MOURE, M. D.....	Medical Interne
WILLIS S. REMINGTON.....	Steward
MARY E. MAY.....	Matron

COUNSEL

JAMES M. E. O'GRADY.....	Rochester, N. Y.
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**ELEVENTH ANNUAL REPORT OF THE MANAGERS OF THE
ROCHESTER STATE HOSPITAL**

To the State Commission in Lunacy

The managers of the Rochester State Hospital have the honor to submit the eleventh annual report of this institution for the year ending September 30, 1901, together with the reports of the superintendent and the treasurer for the same period of time.

Subject to the statutory powers of the Commission, relative to estimates and other matters, the board of managers have, in a general way, directed and controlled the property and concerns of the institution during the year.

The principal articles of supplies have been obtained by joint purchase with the other hospitals. As required by law, the articles manufactured in the State prisons have been purchased at the prices fixed by the board of classification.

The expenditures for the year for maintenance are classified as follows:

For salaries	\$14,428 18
For wages	35,370 32
For provisions and stores	31,838 71
For ordinary repairs	1,802 16
For farm and grounds	3,715 19
For clothing	5,653 01
For furniture and bedding	3,191 15
For books and stationery	963 87
For fuel and light.....	10,042 28
For medical supplies.....	964 16
For miscellaneous expenses	5,113 38
For transportation of patients.....	1,213 60
	<hr/>
	\$114,296 01

Weekly per capita cost \$3.88, practically the same as \$3.887 of last year.

In considering the increasing proportion of admissions of persons of advanced years we appreciate that insanity of old age is very difficult to care for in an ordinary home, and that even in a city where the relief of distress and sickness in institutions and hospitals is undertaken by many charities, senile cases of insanity are not considered proper for admission. When a person is poor and old and has lost his mind admission to the State hospital should not be refused if the patient is legally committed, but we recommend to the Commission that their agent make a special investigation in all such cases to the end that harmless cases may be restored to home care and that reluctant relatives may be impressed with their duty to the aged members of their families in such a manner that they will not find it practicable to shirk it. A similar course is recommended in all commitments of persons who have been weak-minded from childhood. The inability of the institutions for the care of idiots and imbeciles to receive these cases has resulted in the practice of families and physicians seeking their commitment to the State hospitals for the insane. In some cases it may be inimical to the public welfare to force their discharge as "not insane within the meaning of the statute," while in other cases a special investigation by your agent may result in stimulating the flagging interest of relatives and in developing the fact that it was not necessary to have imposed the case upon a hospital for the insane.

As a result of our visits and inspection for the past year a satisfactory condition of affairs is hereby reported, with the exception that the old buildings now occupied by women patients are in need of thorough renovation on account of the improper manner in which additions were made from time to time at the least possible cost to the county before purchase by the State. These imperfect and temporary additions are a real menace to the safety of the patients on account of the tinder-box construction of the mansard, which has an open passage through the fur-

ring space of the lath and plaster from each floor. The old system of small pipes and radiators put in section by section from time to time during the past twenty years does not furnish a comfortable temperature for the patients in cold weather and cannot be used economically. In this portion of the building the only ventilation is by windows and doors. Plans and specifications should be prepared so that, as soon as the new buildings are ready for occupancy, the north wing of the present building may be thoroughly repaired in such a manner as to provide for the safe and economical care of the patients.

It is our duty to again call your attention to the extraordinary expense connected with the water supply as at present arranged. An annual cost of \$3,000 for a scant supply of water is a remarkable expenditure, particularly when less than a mile from the buildings there are several flowing artesian wells which furnish an abundant supply of excellent water.

The Commission should arrange with the State Architect, as recommended in our former reports, for plans and specifications for a supply system that will deliver the water from these wells for use at the hospital, which should be supplemented by an efficient distribution of automatic sprinklers in the unfrequented portions of the building like basements and attics.

The following is a list of the extraordinary improvements needed by the hospital for the ensuing year, so far as they can be foreseen:

Buildings for 800 patients with rooms for employees and officers, including workshops, amusement hall, enlargement of laundry, store and icehouse, together with water supply from Brighton wells.	
Electric lights at soap factory, carpenter shop and cow barn, to lessen the danger of fire.....	\$470
Storm windows for exposed west and south windows..	200
Steel ceilings to replace broken plaster in corridors and rooms	200
Painting inside of day rooms and lavatories, wards 4, 5, 8, 9 and 11.....	450

Spray baths in four women's lavatories (present apparatus allows hot water to come unexpectedly and scald patients).....	\$375
Window guards for 28 windows in single rooms in men's department, formerly occupied by employees, now available for patients.....	250
Bedsteads with sides for 48 feeble and epileptic patients on infirmary wards 3 and 12.....	360
Greenhouses, addition to	1,500
Linoleum for floor of dining-room, infirmary ward 12..	50
Utility room, reception ward female's department, equipment of	180
Shed 30 feet by 40 feet for farm wagons.....	150
Log house in grove with chimney and equipment for sugar bush	225
Wheel scraper for grading	40
Farm house and paint shop, moving of.....	600
Plumbing—Replacing defective plumbing in lavatory buildings with suitable apparatus and fixtures.....	4,000

During the year the average daily population has been 565, with a capacity of 480, and the new admissions have shown an increase in the number of melancholic and senile cases. Nevertheless the hospital has been efficiently managed during the year, and its affairs have gone on quietly and smoothly.

The central hospital of the new group, as planned, promises to furnish the much needed structural facilities for the special care of recoverable cases, but we are satisfied that the third stories which have been added to the buildings for the chronic cases are a great mistake.

We heartily commend the superintendent and his staff for the faithful performance of duty during the year.

These suggestions and recommendations are made with confidence that they will meet your approval, and with appreciation

of the interest which the Lunacy Commission has heretofore manifested in the welfare of the hospital.

Respectfully submitted.

FREDERICK COOK
GEORGE RAINES
WILLIAM MILLER
THOMAS A. O'HARE
JANE E. ROCHESTER
PERLEYETTE H. GRAHAM
C. G. STARKWEATHER

TREASURER'S REPORT

To the Board of Managers

The treasurer respectfully submits the following statement, including the per capita weekly cost, for the year ending September 30, 1901:

Receipts—Special Fund

From State Treasurer for extraordinary improvements (chapter 364, Laws of 1900, and chapter 322, Laws of 1901).....	\$21,781 33
Total from special fund.....	<u>\$21,781 33</u>

Receipts for Manufacture of Soap

Balance on hand from old account.....	\$3,350 56
From State hospitals	11,421 05
From Steward's return	191 04
Total	<u>\$14,962 65</u>

Receipts—Maintenance Fund

Balance on hand from old account.....	\$2,979 69
Transferred from manufacturing fund.....	2,265 94
From State Treasurer for maintenance (chapter 418, Laws of 1900).....	110,183 13
From private patients.....	514 96
From reimbursing patients.....	6,616 41
From criminal insane.....	670 87
From all other sources.....	605 04
Total.....	<u>\$123,836 04</u>

Expenditures—Special Fund

For extraordinary improvements	<u>\$21,781 33</u>
--------------------------------------	--------------------

Expenditures—For Manufacturing of Soap

For running expenses in the manufacture of soap..	\$1,924 18
For stock for the manufacture of soap.....	10,940 12
Miscellaneous expenses	597 96
Balance to new account.....	1,500 39
<hr/>	
Total.....	\$14,962 65
<hr/> <hr/>	

Expenditures—Maintenance Fund

For salaries	\$14,428 18
For wages	35,370 32
For provisions and stores.....	31,838 71
For ordinary repairs	1,802 16
For farm and grounds.....	3,715 19
For clothing	5,653 01
For furniture and bedding.....	3,191 15
For books and stationery	963 87
For fuel and light.....	10,042 28
For medical supplies	964 16
For miscellaneous expenses	5,113 38
For transportation of patients	1,213 60
To State Treasurer.....	7,882 78
Balance on hand to new account.....	1,657 25
<hr/>	
Total.....	\$123,836 04
<hr/> <hr/>	

Weekly per capita cost on daily average number of patients, 564.778, estimates 1 to 12 inclusive, and exclusive of payments for extraordinary improvements and manufacturing..... \$3 88

Respectfully submitted.

F. P. ALLEN

Treasurer

SUPERINTENDENT'S REPORT

To the Board of Managers

The following report of the Rochester State Hospital for the year ending September 30, 1901, is presented in compliance with the statute:

	Men	Women	Total
The number of patients in the hospital October 1, 1900.....	248	302	550
Admitted during the year ending September 30, 1901.....	111	106	217
On original commitments:			
From residences.....	102	95	197
By transfers from county houses	5	6	11
By transfers from other institutions for insane....	4	5	9
	<hr/>	<hr/>	<hr/>
Total number under treatment during year.....	359	408	767
	<hr/>	<hr/>	<hr/>
Daily average population.....	250.452	314.326	564.778
	<hr/>	<hr/>	<hr/>
Capacity of institution.....	218	262	480
	<hr/>	<hr/>	<hr/>
Discharged during the year:			
As recovered	21	29	50
As improved	27	21	48
As unimproved	15	11	26
Died	31	31	62
	<hr/>	<hr/>	<hr/>
Whole number discharged during the year.....	94	92	186
	<hr/>	<hr/>	<hr/>
Remaining October 1, 1901.....	265	316	581
	<hr/>	<hr/>	<hr/>

For the purpose of comparing the results of the year with other years the usual order in previous reports is followed in the digest of the statistical tables.

Among the causes assigned for the insanity of the 217 admissions the physical, including bodily disorders and ill health, was accountable for 108, while the moral, including worry, excitement and shock, was operative in only 49 cases; of these 49 cases assigned to moral causes nearly one-half were due to mental worry and overwork. Among the 108 cases assigned to physical causes about one-third were due to intemperance and allied causes; approximately one-third of all admissions were due to what are considered preventable causes.

Among the different forms of insanity from which the 217 admitted were suffering acute mania existed in 43, acute melancholia in 62, and other forms of insanity promising little or no hope of recovery in 113 cases. Of the 767 patients under treatment during the year, 157 were classed as presumably curable cases; of these 50 cases recovered, thus giving a percentage of recoveries of 31 in presumably curable cases. With such a large proportion under treatment of hopeless forms of mental unsoundness it is easy to understand why only 50 recoveries are noted as the result of the year's work.

It should be remembered in this connection that in addition to those recovered 48 patients were discharged whose condition had so far improved as to enable them to live at home, while of the 26 discharged unimproved 9 were transferred to other institutions for the insane. It is interesting to note that of the 50 patients who recovered during the year 37 had been insane less than a year prior to their admission, and that 43 were under treatment at the hospital for a period of less than one year. Those who have been insane but a short time before admission are more likely to make quick and good recoveries.

In tabulating the same inquiry relative to the patients who died during the year and since the opening of the institution the opposite condition is found, namely, that a longer period of insanity existed before admission, and that the period under treatment at the hospital was relatively for a much longer time.

An hereditary tendency to insanity was found to exist in 71 of the 217 cases admitted during the year—paternal branch in

23, maternal branch in 23, and collateral branches in 25, while there existed no discoverable hereditary tendency in 130, and in 16 cases the facts could not be ascertained.

The pressure for the admission of persons who, advanced in life, are suffering from senile dementia is again brought to your attention. An examination of the annual reports of hospitals for the insane in other States and countries shows that decay of the mental faculties developing as one of the infirmities incident to old age is a constantly increasing factor in swelling the population and death-rate of similar institutions elsewhere.

During the early part of the year there was an unusual amount of acute sickness among the patients and attendants, and a number of old people died as the result of the grippe.

An unsuccessful contest was carried on by an attorney for the discharge of a woman patient who was admitted to the hospital upon the certificates of the city physicians and the order of the surrogate. No effort was made by the State to retain the patient, the attorney for the hospital simply presenting evidence to establish the mental condition of the patient to the satisfaction of the referee and the court.

The capacity of the hospital has been increased (by 30) to 510, but the population is 581, while it is not probable that any important transfers will be made in view of the proposed addition to the buildings.

It has been suggested that there should be a more economical scheme for the care and treatment of the insane than has recently been adopted in this State, and it has been proposed to attempt this by arranging the new buildings in such a manner as to distinctly separate the presumably recoverable patients from the chronic cases.

It has also been suggested that so far as practicable employees and officers should live away from the institution, but this plan is not likely to prevail to any great extent. Because of the incidental, continuous and emergency duties of employees and officers in the care of the insane, greater cost and inefficient care would necessarily result.

Amusements for the patients have been varied and usually appreciated. During the summer and autumn lawn parties, picnics, field sports, basket ball, croquet, tennis and baseball have been indulged in. A flock of sheep was pastured on the eastern lawn in the hope that they would replace the lawn mower and at the same time be a source of entertainment for the patients. During the winter and spring semiweekly music by the orchestra on the wards and weekly entertainments and dances for the patients in the amusement hall have relieved the monotony of indoor life, while outdoor exercise by walks, carry-all drives and "chores" are necessarily limited. During the summer outdoor occupation has been abundant, the crops from the farm and garden being exceptionally good. The completing of the walk and drive to the grove has been a more than ordinarily pleasant vocation for the patients, as many of them appreciated the improvements to the grounds in a personal way. The large product of strawberries, raspberries and green peas this year called for the help of the women patients in gathering them. The regular industries are being continued as usual throughout the year.

The percentage of daily patient population engaged in some kind of useful occupation is 71.34, as follows:

Farm and grounds, 30; barn and stable, 12; shops and factory, 39; sewing, 46; general ward work, 117; kitchen and dining-rooms, 91; laundry, 42.

The junior class of the training school tried the State examination for promotion May 10th. Fifteen passed and four failed. The examination was harder than heretofore, the standard of the schools having been raised. It is proposed to have the course of instruction more thorough in accordance with the demand at all State and general hospitals for a more complete and thorough course of instruction to nurses.

The matron has been successful in starting by contribution a reference library for the nurses and now has 42 volumes and 2 periodicals. This library is kept in the office accessible to the nurses, and is practically in constant use.

A list of the more important improvements of the year includes the new interior telephone system, the completion of the walk and drive to the grove, the construction of the nurses' home which is nearing completion, a summer house on the eastern lawn, steel ceilings in place of falling plaster on corridor leading to the women's wards, the remodeling of the fire-escapes in such a way as to lessen the probabilities of accident and the rebuilding of the arches in front of the heating boilers.

The plans and specifications for the larger buildings of the new group have been received from the State Architect. These provide for a central hospital for the special care of presumably recoverable cases, 50 of each sex, from a total population of 1,000, and buildings for all the male patients from the district. In the central hospital structural facilities for the immediate treatment of the insane are provided, together with space for therapeutic needs consistent with the economical principles of the State government. This is provided for both sexes, as no effective provision exists in the old buildings which will ultimately be used for women patients of the chronic class. In preparing these plans it was conceded that it was not possible to estimate accurately the number of patients requiring special treatment, but from data covering many years in mixed institutions "acute and chronic," a conservative estimate is 10 per cent. There may be times when this number will be exceeded, but with the variety of construction available the medical staff should not fail in finding an appropriate location for any excess in this number. It is expected that a few chronic patients who assist in domestic work will also find accommodations in the central hospital. The plans prepared by the State Architect are designed in such a manner that the ward buildings radiate from the central solarium and exercise rooms in connection with apartments for special treatment, including hydrotherapy, electrical and surgical equipment. The ward buildings are designed in such a manner as to provide for five classes of each sex, and the building is provided with special diet kitchen, supplemented by utility rooms on each ward.

The buildings for the men patients of the chronic class are designed as cheaply as possible and each is three stories in height, which undesirable arrangement is necessitated by the statutory limit of \$550 per capita for construction, equipment and furniture. The buildings were originally designed with only two stories, but as an outcome of the advertisement for bids for construction it was evident that if the buildings were to be erected at all it would be necessary to reduce in some manner the cost of construction. After much discussion and consideration it was concluded to agree to a compromise relative to height of the buildings to the extent that the buildings to be used for chronic patients should be three stories, while the central hospital, which was to be used for acute cases, should remain two stories. The ground plan for the whole group has not yet been definitely determined, and it will be necessary to add an amusement hall, store, ice house and other outbuildings.

The city limits have been extended to include the building site so that water supply and sewerage are assured, and it is suggested that the improvement of South avenue be continued in front of the new buildings.

Official visits have been made by the Governor, members of the Legislature, the State Commission in Lunacy, State Architect, and frequent visits have been made by the board of managers and the regular visitors of the State Charities Aid Association, and our thanks are due to all for kindly advice and assistance.

Respectfully submitted.

EUGENE H. HOWARD

Superintendent

REPORT OF THE STEWARD

The steward makes the following report of the production of the farm and garden:

FARM

Credit

Buckwheat, 125 bushels, at 25 cents.....	\$62 50
Corn (ear), 500 bushels, at 35 cents.....	175 00
Corn fodder, 50 tons, at \$3.....	150 00
Ensilage, 175 tons at \$1.75.....	306 35
Eggs, 420½ dozens at 16½ cents.....	69 38
Hay, 100 tons, at \$10.....	1,000 00
Mangels, 1,000 bushels, at 10 cents.....	100 00
Milk, 121,890 quarts, at 2.48 cents.....	3,033 70
Pork, 14,999 pounds, at 6.7 cents.....	1,004 13
Spultz, 13 bushels, at 40 cents.....	5 20
<hr/>	
Total for farm.....	\$5,906 26
<hr/>	

GARDEN

Credit

Asparagus, 59 bunches at 5 cents.....	\$2 95
Beet greens, 170 bushels, at 10 cents.....	17 00
Beets (early), 75 bushels, at 25 cents.....	18 75
Beets (late), 250 bushels, at 25 cents.....	62 50
Cabbage (early), 1,200 heads, at 4 cents.....	48 00
Cabbage (late), 20,000 heads, at 2 cents.....	400 00
Carrots, 400 bushels, at 25 cents.....	100 00
Celery, 25,000 heads, at 1 cent.....	250 00
Corn (green), 1,890 dozens, at 15 cents.....	283 50
Corn (evaporated), 2,275 pounds, at 7 cents.....	159 25
Cucumbers, 745 dozens, at 10 cents.....	74 50
Horse-radish, 105 bunches, at 3 cents.....	3 15
Lettuce, 2,835 bunches, at 1.9 cents.....	53 70
Onions (green), 4,750 bunches, at 2 cents.....	95 00

Onions, 200 bushels, at 75 cents.....	\$150 00
Parsnips, 200 bushels, at 50 cents.....	100 00
Potatoes, 252 bushels, at 50 cents.....	126 00
Peas (green), 99 bushels, at 50 cents.....	49 50
Radish, 1,925 bunches, at 2.6 cents.....	50 75
Rhubarb, 690 bunches, at 3 cents.....	20 70
Raspberries, 635 quarts, at 7 cents.....	44 45
Squash, hubbard, 2 tons, at \$40.....	80 00
Squash, summer, 185 dozens, at 25 cents.....	46 25
Strawberries, 2,268 quarts, at 7 cents.....	158 76
String beans, 65 bushels, at 50 cents.....	32 50
Tomatoes (green), 70 bushels, at 20 cents.....	14 00
Tomatoes (ripe), 192 bushels, at 50 cents.....	96 00
Turnips, 300 bushels, at 25 cents.....	75 00
Vegetable oysters, 100 bushels, at 50 cents.....	50 00

Total for garden.....	\$2,662 21
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Total for farm.....	5,906 26
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Total for farm and garden.....	\$8,568 47
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Debit

Amount charged farm and grounds (as per treasurer's reports)	\$2,471 90
Amount of farm wages.....	1,581 19
Value of farm products used for farm animals.....	1,279 03
Net profit to balance.....	3,236 35
	<hr/>
	\$8,568 47
	<hr/>

Value of live stock on hand September 30, 1901:

15 horses, at \$100.....	\$1,500 00
36 milch cows, at \$40.....	1,440 00
24 breeding sows, at \$8.....	192 00
2 boars, at \$7.....	14 00

2 boars, young, at \$4.....	\$8 00
28 pigs, at \$2.....	56 00
57 shoats, at \$4.....	228 00
1 stag	15 00
6 fat hogs, at \$20.....	120 00
50 ducks, at 30 cents.....	15 00
70 hens, at 30 cents.....	21 00
300 chickens, at 20 cents.....	60 00
38 turkeys, at 60 cents.....	22 80
	<hr/>
	\$3,691 80
	<hr/>

Respectfully submitted.

W. S. REMINGTON

Steward

REPORT OF THE MATRON

Articles made and repaired in the women's department:

Aprons, women's	2,979
Aprons, men's	259
Bibs, rubber	33
Burial robes	56
Bureau covers	110
Bread cloths	150
Bathing suits	3
Bedroom slippers, pairs of.....	25
Bags for hot-water bottles.....	4
Curtains	33
Cuffs, pairs of.....	5
Chemises	233
Combination suits	6
Caps, nurses'	223
Caps, women employees'.....	18
Caps, chefs'	130
Caps for day.....	8
Clothes bags	25
Cover for machinery.....	1
Coffee strainers	89
Cushions	5
Cushion covers	15
Curtains for screens.....	100
Dresses	776
Dresses, indestructible	1
Dress waists	10
Dress skirts	4
Drawers, pairs of.....	279
Handkerchiefs	1,096
Hats, trimmed.....	202
Holdings	646
Kerchiefs for neck.....	2

Laundry bags, denim.....	41
Laundry bags, A. A.....	1
Laundry squares	28
Laundry book	1
Night dresses	582
Night shirts	250
Neckties, men's	373
Napkins for wards.....	221
Operating gowns	3
Pillow cases	859
Pillow ticks	58
Protection sheets	10
Pads for beds, covered.....	43
Painter's drop cloth.....	1
Stupe wringers	12
Sand bags	2
Sheets	2,405
Sheets, bath	139
Sheets, one-half tie-over.....	2
Screens, mosquito netting.....	9
Sorting bags for laundry.....	139
Shirts, hickory	505
Shirts percale	39
Shirts, fine, white.....	32
Skirts, indestructible	1
Skirts, Canton flannel.....	150
Skirts, colored	565
Skirts, white	2
Scarf ties	902
Tablecloths	225
Tray cloths	741
Towels, hand	1,532
Towels, bath	1,671
Towels, dish	2,338
Towels, roller	223
Tea cloths	54

Tablespreads, linen	30
Table napkins	72
Underwaists	12
Miscellaneous	23

Total	22,822
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Yards of material used for bandages.....	781 $\frac{1}{4}$
Articles mended	109,368

Respectfully submitted.

MARY E. MAY

Matron

REPORT OF SUPERVISOR

The supervisor reports the following list of articles made and repaired in the male department:

Arches	3
Baskets, laundry	2
Bellyband	1
Beetle	1
Bench, shoe	3
Bench, fire pail	1
Board, bread	2
Box, shipping	1
Box, barber's	1
Box, soap	12
Box, transplanting	66
Cart, hand	1
Cage, squirrel	1
Cement walk, square feet	7,840
Cement floor, square feet	840
Chairs, caned	197
Checks, overdraw	4
Checks, loop	6
Clod crusher	1
Coats	674
Coping, square feet	142
Crates, potato	82
Cupboard	1
Doors, slatted	6
Dryers, floor	43
Frames, door	2
Gates	2
Handles, hammer	2
Handles, hatchet	6
Handles, chisel	12
Handles, polisher	6

Hangers, coat	24
Mattresses.....	50
Mittens, cloth	144
Neckyoke.....	1
Nets, laundry	9
Paddles.....	30
Peels, bakers'.....	3
Pillows.....	32
Polishers, floor	4
Pointing, square feet.....	792
Rack, wagon	1
Rack, sheep	1
Reaches, wagon	4
Sawbuck.....	1
Screens, door	3
Screens, window	17
Screen, folding	1
Seats, closet	3
Shades, window	23
Shelf, mantle	1
Shelf.....	1
Shoes, men's	199
Shoes, women's	129
Shoes, canvas	35
Sidewalk covering, feet	100
Surcingles.....	3
Slippers.....	125
Sleighs, trucks, pair.....	1
Stands, flower	2
Step, slatted	1
Stone, laid, perches.....	80
Straps, hame	14
Straps, extension	2
Straight edge, feet.....	470
Tables.....	4
Tank, garbage	1

Ticks.	29
Trays, flower	12
Trousers.	565
Vests.	201
Wringers, stupe	12

Total.	13,068
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Repaired pieces	13,247
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Respectfully submitted.

DAVID BALLAGH

Supervisor

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900.....	248	302	550
Admitted during year ending September 30, 1901.....	111	106	217
On original commitments:			
From residences.....	102	95	197
By transfers from county houses.....	5	6	11
By transfers from other institutions for insane.....	4	5	9
Total number under treatment during year.....	359	408	767
Daily average population.....	250.452	314.326	864.778
Capacity of institution.....	218	262	480
Discharged during the year:			
As recovered.....	21	29	50
As improved.....	27	21	48
As unimproved.....	15	11	26
Died.....	31	31	62
Whole number discharged during the year.....	94	92	186
Remaining October 1, 1901....	265	316	581

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	July 1, 1891
Total acreage of grounds and buildings	154.755
Value of real estate, including buildings	\$309,059 02
Value of personal property	31,254 34
Acreage under cultivation	104 75

Receipts during year, maintenance fund:

Balance on hand October 1, 1900	\$2,979 69
From State Treasury for maintenance, on estimates 1 to 12, inclusive	110,183 13
From private patients	514 96
From reimbursing patients	7,287 28
From all other sources	2,870 98

Total receipts for maintenance	\$123,836 94
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Total receipts from State Commission in Lunacy for extraordinary improvements	\$21,518 94
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Total receipts from manufacturing fund	11,612 08
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Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries	\$14,428 18
Estimate No. 2. For wages	35,370 32
Estimate No. 3. For provisions and stores	31,838 71
Estimate No. 4. For ordinary repairs	1,802 16
Estimate No. 5. For farm and grounds	3,715 19
Estimate No. 6. For clothing	5,653 01
Estimate No. 7. For furniture and bedding	3,191 15
Estimate No. 8. For books and stationery	963 87
Estimate No. 9. For fuel and light	10,042 28
Estimate No. 10. For medical supplies	964 16
Estimate No. 11. For miscellaneous expenses	5,113 38
Estimate No. 12. For transportation	1,213 60

Total disbursements, estimates 1 to 12, inclusive

\$114,296 01

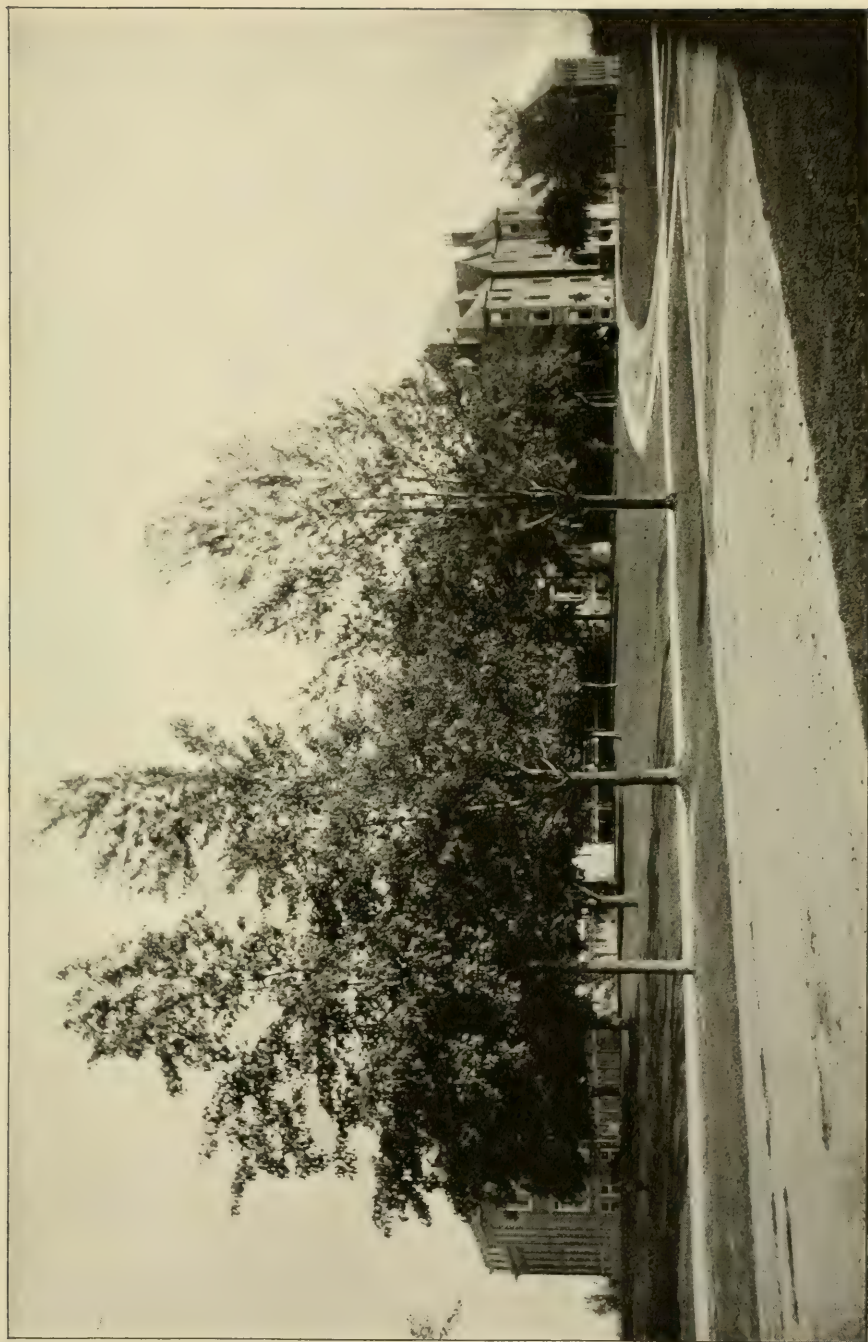
Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionment by State Commission in Lunacy	\$21,518 94
<hr/>	
Total disbursements during year, manufacturing fund	\$13,462 26
<hr/>	
Remitted to State Treasurer, sundry receipts, Chap. 580, Laws 1899	\$7,882 78
<hr/>	
Balances October 1, 1901:	
General maintenance fund	\$1,657 25
Manufacturing fund	1,500 39
<hr/>	
Weekly per capita cost on daily average number of patients, estimates 1 to 12, inclusive	\$3.88
<hr/>	
Maximum rate of wages paid attendants:	
Men	\$33 00
Women	30 00
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Minimum rate of wages paid attendants:	
Men	\$20 00
Women	14 00
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Proportion of day attendants to average daily population	1 to 9.737
Proportion of night attendants to average daily population	1 to 51.343
Percentage of daily patient population engaged in some kind of useful occupation	71.34
Estimated value of farm and garden products during year	\$8,568 47
Estimated value of articles made or manufactured by patients during year	9,518 99
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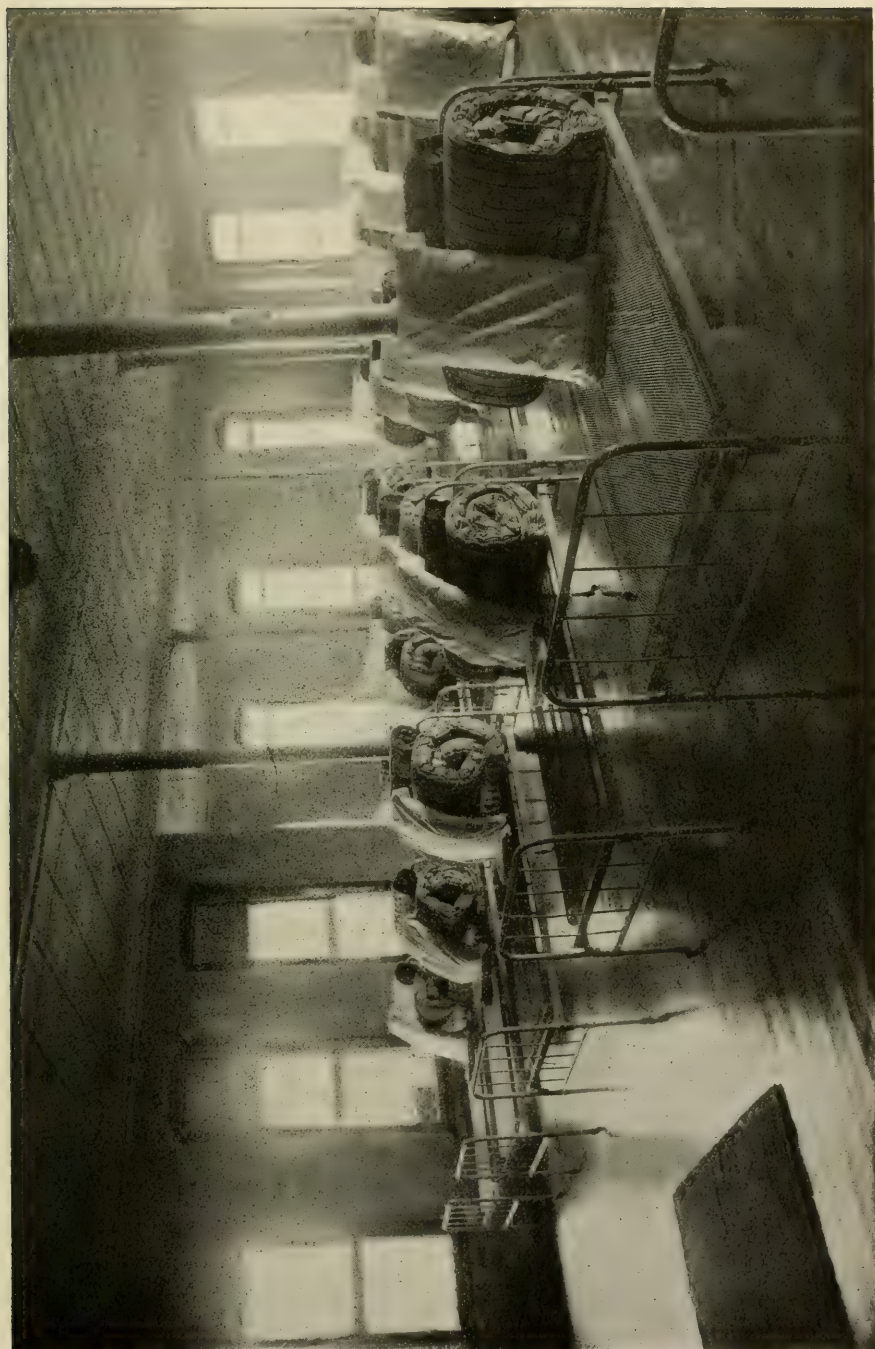
TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDIS- POSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.).....	15	10	25	2	2	4	2
Mental strain, worry and overwork (not included in above)	11	11	22	4	2	6	...
Religious excitement.....	...	1	1	...	...	...	...
Fright and nervous shock. ....	...	1	1	...	...	...	...
Physical:							
Intemperance	24	2	26	9	...	9	4
Sexual excess..	4	...	4	1	...	1	1
Venereal diseases	9	...	9	2	...	2	...
Sunstroke .....	...	1	1	...	...	...	...
Accident or injury.....	...	1	1	...	...	...	...
Parturition and puerperium .....	...	11	11	...	2	2	2
Privation and overwork...	2	2	4	...	1	1	...
Epilepsy	6	8	14	3	3	6	1
Diseases of skull and brain.	3	1	4	...	...	...	...
Old age	4	8	12	...	2	2	2
Epidemic influenza.....	1	2	3	...	...	...	...
Abuse of drugs.....	...	1	1	...	...	...	...
All other bodily disorders and ill health.....	7	11	18	4	4	8	...
Heredity	11	18	29	11	18	29	...
Congenital defect.....	6	5	11	...	...	...	...
Unascertained	8	12	20	...	1	1	4
Total.....	111	106	217	36	35	71	16



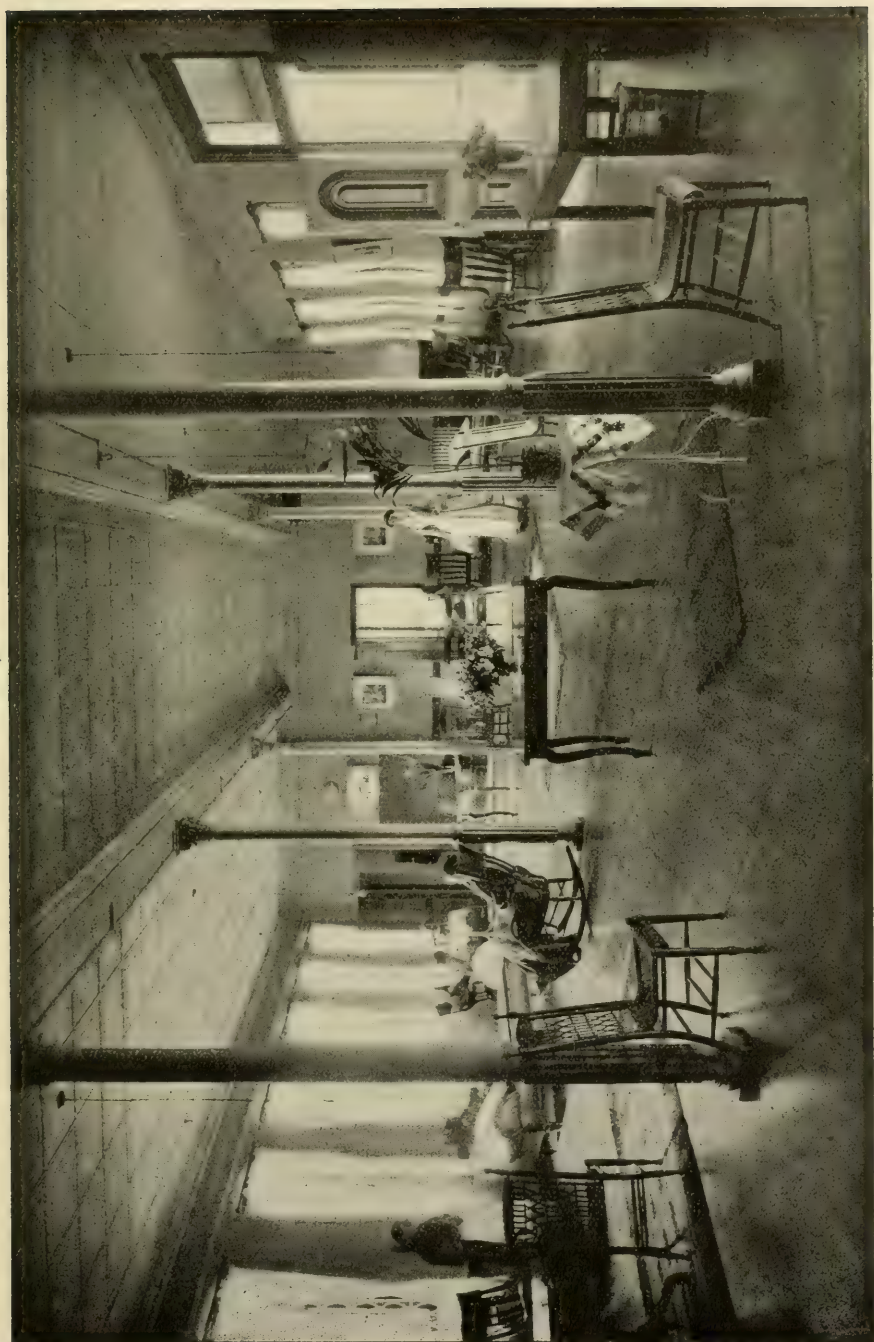
ROCHESTER STATE HOSPITAL.—NORTH WING AND ADMINISTRATIVE BUILDING.



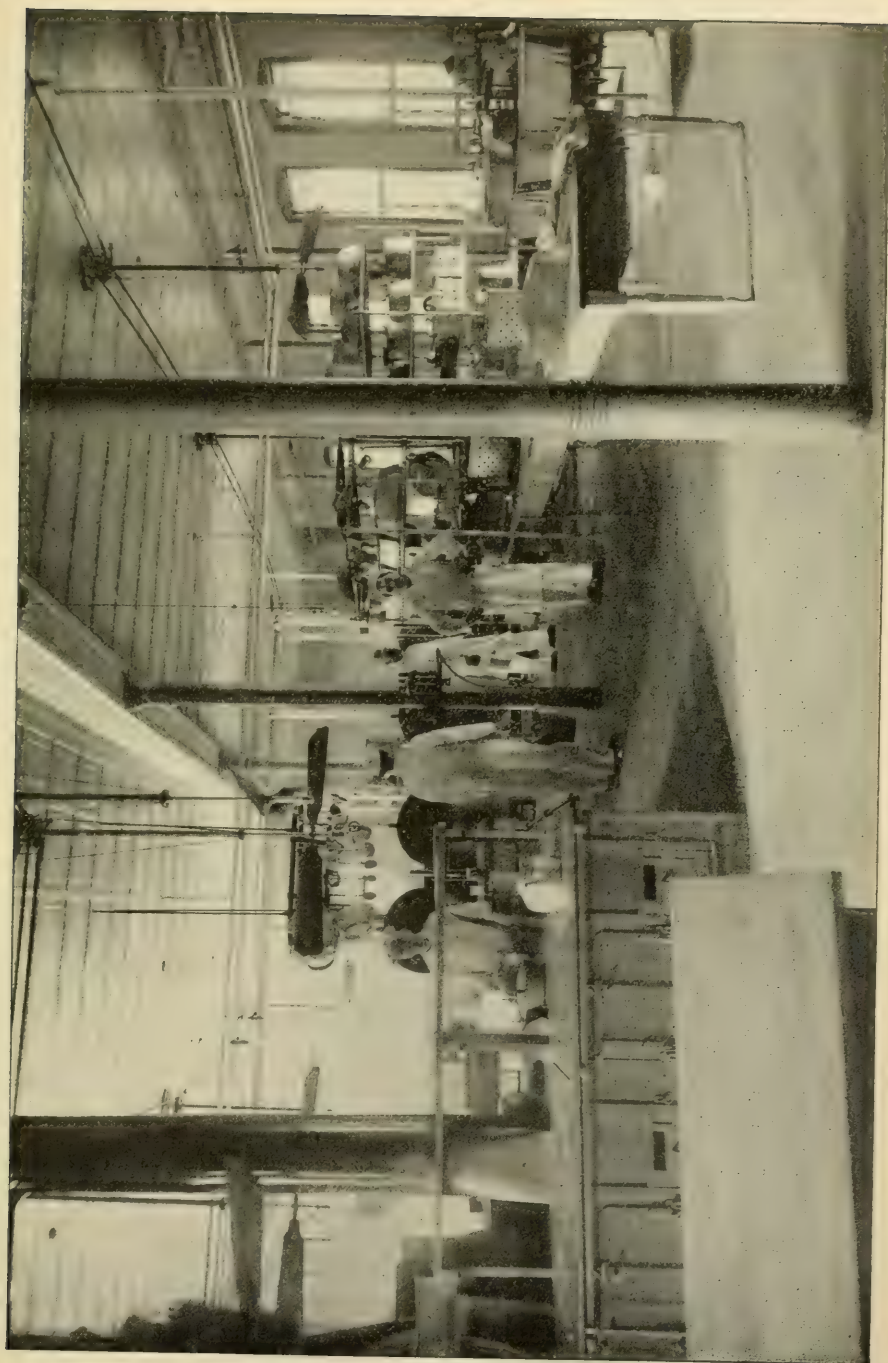
ROCHESTER STATE HOSPITAL.—DORMITORY.



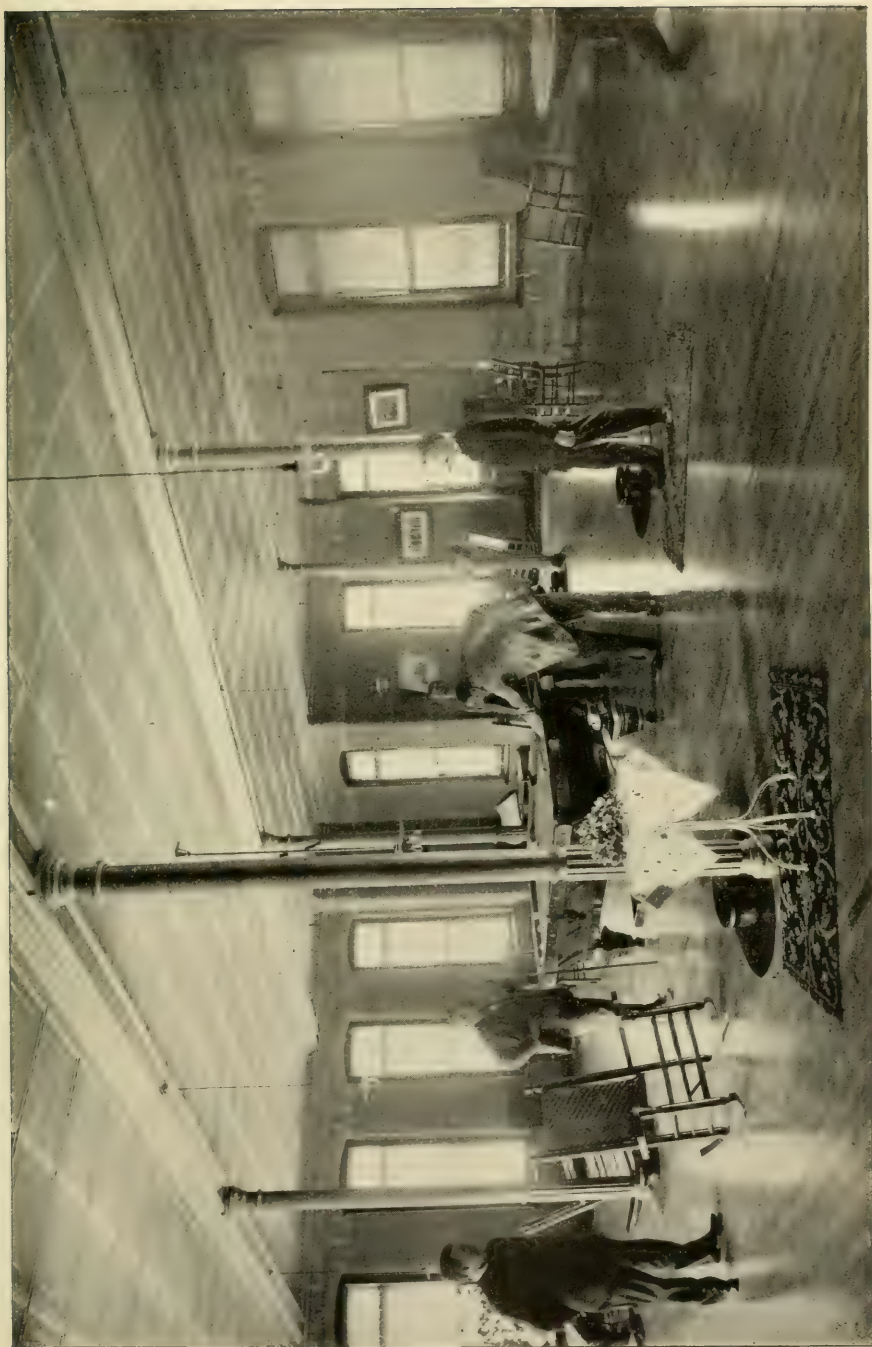
ROCHESTER STATE HOSPITAL.—RECEPTION ROOM, MALE WARD.



ROCHESTER STATE HOSPITAL.—RECEPTION ROOM, FEMALE WARD.



ROCHESTER STATE HOSPITAL.—THE KITCHEN.



ROCHESTER STATE HOSPITAL.—CLUB ROOM, MALE WARD.

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious.....	1	....	1	9	.....	9
Mania, acute.....	42	11	4	468	171	39
Mania, recurrent.....	7	1	....	93	36	5
Mania, chronic.....	21	4	4	215	16	49
Melancholia, acute.....	56	27	8	282	125	31
Melancholia, simple.....	6	4	....	138	40	....
Melancholia, chronic.....	8	2	....	118	9	19
Alternating (circular) insanity.....	....	....	....	12	3	....
Paranoia.....	6	....	....	29	....	....
General paralysis.....	15	....	9	129	....	95
Dementia, primary.....	5	1	1	27	9	5
Dementia, terminal.....	35	....	30	465	3	265
Epilepsy with insanity.....	10	....	4	77	1	32
Imbecility with maniacal attacks..	5	....	1	34	....	2
Idiocy.....	....	....	....	3	....	1
Not insane*.....	....	....	....	1	....	3
Total.....	217	50	62	2,100	413	555

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases :						
Typhoid fever.				1		1
Influenza	1		1	2	5	7
Erysipelas.				1	1	2
Septicemia and pyemia.				1		1
Tuberculosis.	1		1	27	32	59
Constitutional diseases :						
Diabetes mellitus and diabetes insipidus.				1		1
Diseases of the digestive system :						
Mouth, salivary glands, pharynx, tonsils and œsophagus.		1	1	1	1	2
Diseases of the stomach.				1		1
Diseases of the intestines.	1	4	5	12	25	37
Diseases of the liver.					2	2
Diseases of the pancreas.				1		1
Diseases of the peritoneum.				2	1	3
Diseases of the respiratory system :						
Diseases of the bronchi.				1	17	18
Diseases of the lungs.	2	3	5	23	20	43
Diseases of the circulatory system :						
Diseases of the heart.				12	8	20
Arterio-sclerosis.	3		3	8	1	9
Diseases of the blood and ductless glands :						
Diseases of the genito-urinary system.	2		2	5	5	10
Diseases of the nervous system :						
Diseases of the spinal cord.	1		1	3		3
Diseases of the meninges.	1		1	6	2	8
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions).	2	4	6	31	22	53
Functional nervous diseases (par- alysis agitans, chorea, eclamp- sia, hysteria, neurasthenia).				2	1	3
Epilepsy.	3		3	15	11	26

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Mental diseases:						
Exhaustion of acute mental disease	6	9	15	31	46	77
Exhaustion of chronic mental disease						
General paralysis of the insane...	6	2	8	73	16	89
Debility of old age.....	2	7	9	21	30	51
Accident				1	5	6
Suicide.....				2	5	7
Surgical and gynecological diseases and diseases of the skin.....				3	3	6
Malignant new growths or cancer.....		1	1	...	9	9
Total	31	31	62	287	268	555

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during
the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch	14	8	22	83	94	177
Maternal branch	9	13	22	59	125	184
Paternal and maternal branches	1	1	2	7	6	13
Collateral branches ...	12	13	25	110	104	214
No hereditary tendency	63	67	130	433	503	936
Unascertained	12	4	16	343	233	576
Total	111	106	217	1,035	1,065	2,100

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	48	36	84	494	384	878
Married	52	54	106	424	478	902
Widowed	8	15	23	104	194	298
Divorced	2	1	3	9	9	18
Unascertained	1	.....	1	4	.....	4
Total	111	106	217	1,035	1,065	2,100

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate	2	.....	2	20	4	24
Academic	4	11	15	46	78	124
Common school	95	86	181	819	746	1,565
Read and write	3	.....	3	50	46	96
Read only .....	..	1	1	42	97	139
No education	2	7	9	40	88	128
Unascertained	5	1	6	18	6	24
Total	111	106	217	1,035	1,065	2,100

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	4	2	6	3	4	7	27	25	52	53	34	87
One to three months	4	5	9	9	3	12	36	19	55	35	35	70
Three to six months	3	...	3	...	...	...	22	18	40	23	20	43
Six to nine months	4	3	7	...	4	4	21	16	37	12	18	30
Nine months to one year . . . . .	...	...	...	4	2	6	7	7	14	19	12	31
One year to eighteen months	1	4	5	2	4	6	28	33	61	26	24	50
Eighteen months to two years . . . . .	...	...	...	2	3	5	5	5	10	15	15	30
Two to three years	4	4	8	3	2	5	37	25	62	24	15	39
Three to four years	2	3	5	4	2	6	22	17	39	18	21	39
Four to six years	2	3	5	2	4	6	22	21	43	22	23	45
Six to ten years	1	4	5	...	...	...	21	24	45	17	9	26
Ten to twenty years	2	2	4	...	...	...	13	25	38	12	21	33
Twenty years and over	1	1	2	2	3	5	11	13	24	11	21	32
Unascertained	3	...	3	...	...	...	15	20	35	...	...	...
Total	31	31	62	31	31	62	287	268	555	287	268	555
Average duration of insane life (giving years and tenths)	6.32			7.9			6.95			8.74		
	7.11			7.85								

TABLE No. 12

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCT. 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years..	.....	.....	.....	1	1	2
From 15 to 20 years..	1	.....	1	40	26	66
From 20 to 25 years..	10	8	18	102	88	190
From 25 to 30 years..	14	11	25	123	119	242
From 30 to 35 years..	18	21	39	139	140	279
From 35 to 40 years..	16	16	32	135	133	268
From 40 to 50 years..	22	24	46	219	216	435
From 50 to 60 years..	17	8	25	133	143	276
From 60 to 70 years..	7	9	16	78	112	190
From 70 to 80 years..	5	7	12	43	60	103
From 80 to 90 years..	1	2	3	19	26	45
Over ninety.....	.....	.....	.....	1	1	2
Unascertained.....	.....	.....	.....	2	.....	2
Total.....	111	106	217	1,035	1,065	2,100

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCT. 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years..	1	1	2	13	12	25
From 20 to 30 years..	4	8	12	48	73	121
From 30 to 40 years..	4	14	18	47	77	124
From 40 to 50 years..	6	5	11	45	46	91
From 50 to 60 years..	3	1	4	15	24	39
From 60 to 70 years..	3	.....	3	5	7	12
From 70 to 80 years..	.....	.....	.....	.....	1	1
Total.....	21	29	50	173	240	413

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years..	1	.....	1	1	.....	1
From 20 to 25 years..	.....	1	1	6	6	12
From 25 to 30 years..	3	.....	3	18	13	31
From 30 to 35 years..	2	1	3	17	10	27
From 35 to 40 years..	2	2	4	33	24	57
From 40 to 50 years..	6	7	13	57	42	99
From 50 to 60 years..	5	4	9	50	48	98
From 60 to 70 years..	5	5	10	47	58	105
From 70 to 80 years..	6	8	14	40	39	79
From 80 to 90 years..	1	1	2	17	26	43
Over 90 years.....	.....	2	2	.....	2	2
Unascertained.....	.....	.....	.....	1	.....	1
Total	31	31	62	287	268	555

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month	24	19	43
One to three months	15	21	36
Three to six months	16	2	18
Six to nine months	2	11	13
Nine months to one year	1	4	5
One year to eighteen months	13	12	25
Eighteen months to two years		1	1
Two to three years	5	7	12
Three to four years	9	6	15
Four to five years	5	5	10
Five to ten years	9	8	17
Ten to fifteen years	3	4	7
Fifteen to twenty years	2		2
Twenty to thirty years		4	4
Thirty years and upwards		1	1
Unascertained	7	1	8
Total	111	106	217

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	9	10	19
One to three months	21	14	35
Three to six months	22	10	32
Six to nine months	6	16	22
Nine months to one year	6	11	17
One year to eighteen months	15	27	42
Eighteen months to two years	10	18	28
Two to three years	17	30	47
Three to four years	14	33	47
Four to five years	18	27	45
Five to ten years	68	51	119
Ten to fifteen years	34	31	65
Fifteen to twenty years	12	10	22
Twenty to thirty years	10	24	34
Thirty years and upwards	3	4	7
Total	265	316	581

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physi- cians, lawyers, archi- tects, artists, authors, civil engineers, sur- veyors, etc.	2	.....	2	47	3	50
Commercial:						
Bankers, merchants, ac- countants, clerks, salesmen, shopkeep- ers, shopmen, stenog- raphers, typewriters, etc.	14	2	16	140	4	144

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Agricultural and pastoral: Farmers, gardeners, herdsmen, etc.	13	.....	13	202	2	204
Mechanics at out door vocations: Blacksmiths, carpen- ters, engine fitters, sawyers, painters, police, etc.	24	.....	24	166	.....	166
Mechanics, etc., at sedentary voca- tions: Bootmakers, bookbind- ers, compositors, weavers, tailors, bakers, etc.	23	.....	23	166	5	171
Domestic service: Waiters, cooks, serv- ants, etc.	5	6	11	24	213	237
Educational and higher domestic duties: Governesses, teachers, students, housekeep- ers, nurses, etc. . . . .	.....	88	88	3	711	714
Commercial: Shopkeepers, sales- women, stenogra- phers, typewriters, etc. . . . .	.....	1	1	8	20	28
Employed in sed- entary occupa- tions: Tailoresses, seamstress- es, bookbinders, fac- tory workers, etc. . . . .	.....	8	8	2	73	75
Prostitutes . . . . .	.....	.....	.....	.....	2	2
Laborers	22	.....	22	223	.....	223
No occupation	6	1	7	48	26	74
Unascertained	2	.....	2	6	6	12
Total	111	106	217	1,035	1,065	2,100

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Arabia.....				2		2
Austria.....				1	5	6
Belgium.....				1		1
Canada.....	9	8	17	59	59	118
England.....	3	5	8	42	55	97
France.....				1	2	3
Germany.....	7	10	17	119	122	241
Holland.....	1	2	3	9	10	19
Hungary.....					1	1
Ireland.....	8	6	14	81	131	212
Italy ..	2	5	7	9	10	19
Norway.....				1	1	2
Nova Scotia.....					1	1
Poland.....	1	2	3	7	8	15
Prussia.....				1		1
Russia.....	2	3	5	8	14	22
Scotland.....		1	1	5	12	17
Sweden.....	2		2	6	2	8
Switzerland.....				6	4	10
United States.....	73	64	137	660	616	1,276
Wales.....				1	2	3
Unascertained.....	3		4	16	10	26
Total.....	111	106	217	1,035	1,065	2,100

Of the total number admitted since the 1st of October, 1888, the parents of 61.7 per cent were both of foreign birth.

In 5.9 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In .4 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany			
Allegany			
Broome			
Cattaraugus			
Cayuga	2		
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland			
Delaware			
Dutchess			
Erie	2		
Essex			
Franklin			
Fulton			
Genesee	2		
Greene			
Hamilton			
Herkimer	1		
Jefferson			
Kings			
Lewis			
Livingston	18		
Madison			
Monroe	180		
Montgomery			
Nassau			
New York	4		
Niagara	1		
Oneida			
Onondaga	1		
Ontario	2		
Orange			
Orleans	2		
Oswego			
Otsego			
Putnam			
Queens			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
Rensselaer.....			
Richmond.....			
Rockland.....			
St Lawrence.....			
Saratoga.....			
Schenectady.....			
Schoharie.....			
Schuyler.....			
Seneca.....			
Stenben.....	2		
Suffolk.....			
Sullivan.....			
Tioga.....			
Tompkins.....			
Ulster.....			
Warren.....			
Washington.....			
Wayne.....			
Westchester.....			
Wyoming.....			
Yates.....			
Soldiers' Home.....			
Total.....	217		

TABLE No. 20

Showing the residence by counties and classification of patients remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany						
Allegany						
Broome						
Cattaraugus		2	2			
Cayuga		3	3			
Chautauqua						
Chemung						
Chenango						
Clinton						
Columbia						
Cortland						
Delaware						
Dutchess						
Erie	2	5	7			
Essex						
Franklin						
Fulton						
Genesee	5	3	8			
Greene						
Hamilton						
Herkimer	1		1			
Jefferson						
Kings						
Lewis						
Livingston	16	17	33			
Madison						
Monroe	237	271	508	1	1	2
Montgomery						
New York	1		1			
Niagara		1	1			
Oneida						
Onondaga		1	1			
Ontario	1	3	4			
Orange						
Orleans	1	2	3			
Oswego						
Otsego						
Putnam						

Table No. 20—(Concluded)

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Queens						
Rensselaer						
Richmond						
Rockland						
St Lawrence						
Saratoga						
Schenectady						
Schoharie						
Schuyler						
Seneca						
Steuben		2	2			
Suffolk						
Sullivan						
Tioga						
Tompkins						
Ulster						
Warren						
Washington						
Wayne		3	3			
Westchester						
Wyoming		2	2			
Yates						
Total	264	315	579	1	1	2

SIXTH ANNUAL REPORT
OF THE
LONG ISLAND STATE HOSPITALS
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

OFFICERS OF THE HOSPITALS—MANAGERS

ALEXANDER E. ORR, President.....	Brooklyn
JOHN G. DEUBERT, Vice-President.....	Brooklyn
EVAN F. SMITH, M. D., Secretary.....	Brooklyn
THERON L. SMITH.....	Smithtown
BRADISH JOHNSON.....	Islip
JAMES McMAHON	Brooklyn
GEORGE L. THOMPSON.....	Kings Park

TREASURER

HENRY E. ABELL, JR.....	Brooklyn
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ATTORNEY

MARCUS B. CAMPBELL.....	Brooklyn
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PURCHASING STEWARD

FREDERICK A. WHEELER.....	New York
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RESIDENT OFFICERS

ROBERT M. ELLIOTT, M. D.....	Superintendent
IRA O. TRACY, M. D.....	First Assistant Physician
D. EDWARD WARREN, M. D.....	Second Assistant Physician
EDWARD L. PARKER, M. D.....	Junior Assistant Physician
CAROLINE M. STENGEL, M. D.....	Woman Physician
H. ELIZABETH BALCH, M. D.....	Acting Woman Physician
VACANCY	Medical Interne
WILLIAM L. BUCK.....	Resident Steward
MARY A. JOHNSON.....	Matron

NON-RESIDENT OFFICERS

WILLIAM BROWNING, M. D. Consulting Neurologist
GEORGE McNAUGHTON, M. D. Consulting Gynaecologist
ALGERNON T. BRISTOW, M. D. Consulting Surgeon
JAMES M. WINFIELD, M. D. Consulting Dermatologist
JAMES COLE HANCOCK, M. D. Ophthalmologist
FRANK QUACKENBUSH, D. D. S. Dentist

KINGS PARK HOSPITAL

Resident Officers

OLIVER M. DEWING, M. D. Superintendent
GEORGE O'HANLON, M. D. First Assistant Physician
PAUL G. TADDIKEN, M. D. Second Assistant Physician
ARTHUR J. CAPRON, M. D. Assistant Physician
THEODORE I. TOWNSEND, M. D. Assistant Physician
W. H. HAGENBUCH, M. D. Assistant Physician
BRYAN G. WILLIAMS, M. D. Assistant Physician
D. C. MacCLYMONT, M. D. Junior Physician
JOHN R. HARDING, M. D. Junior Physician
B. ROSS NAIRN, M. D. Junior Physician
ETHAN A. NEVIN, M. D. Junior Physician
MENAS S. GREGORY, M. D. Junior Physician
ANNA CRAIG, M. D. Woman Physician
CHAS. S. PITCHER. Resident Steward

Non-Resident Medical Officers

WARD A. HOLDEN, M. D. Ophthalmologist
FRANK QUACKENBUSH, D. D. S. Dentist

REPORT OF THE BOARD OF MANAGERS OF THE LONG ISLAND STATE HOSPITALS

BOROUGH OF BROOKLYN, *December 12, 1901*

To the State Commission in Lunacy, Albany, N. Y.

Gentlemen.—The managers of the Long Island State Hospitals, in accordance with statutory requirements, respectfully submit their sixth annual report.

The personnel of the board has been changed during the year by the appointment of Mr. George L. Thompson in place of Mrs. O. L. Jones, whose term of office expired January 1, 1900.

The efficiency of the hospitals has greatly increased during the past year, largely owing to the reorganization of 1900, under which the separate departments of Kings Park and Flatbush became independent hospitals. The managers take much pleasure in recording this fact after an extended trial, as it fully confirms the recommendations and predictions of the State Commission in Lunacy relative to the Manhattan and Long Island State hospitals as set forth in their report for the year ending September 30, 1899.

KINGS PARK HOSPITAL

Since our last annual report the Long Island Railroad has provided cars with special compartments for the transportation of the insane, and no difficulty is now experienced in transferring the most disturbed acute cases to this hospital.

By reference to the reports of the superintendent it will be seen that a large amount of work has been accomplished and many improvements made during the year.

We recommend that the following additions be made as a means of increasing the efficiency of the hospital:

1. A building for the hospital treatment of acute cases of both sexes.

2. Better accommodations for employees.
3. An amusement hall.
4. Changes in the heating plant through which great economies can be effected.

FLATBUSH HOSPITAL

In our annual report of last year attention was called to the necessity for a new hospital in view of the fact that the fee of the buildings and land of this institution is in the city of New York, and that the privilege of leasing the property from year to year does not extend beyond September 30, 1905. It is the judgment of the board that the condition of the buildings and plant is such and the grounds so limited in extent that there is not warrant for making any attempt to obtain a further extension of the lease even if the municipal authorities were willing to entertain it, which it is understood is not the case.

The attention of the State Commission in Lunacy is again directed to this subject, as in the opinion of the board three and a half years are not more than sufficient in which to select a site, obtain plans and specifications and erect suitable buildings adequate to the hospital needs of this section of the State. The number of patients is now 1,193, and although only one-third of those committed from the borough of Brooklyn were received at this hospital during the year, the increase amounted to 50.

Extraordinary repairs and improvements made during the year consisted in painting the window frames and guards of the main building, renewing the plumbing in six of the lavatories in the male department, enclosing the fire-escapes at the annex, and the addition of three hundred new spring bedsteads for the annex. In the management of this hospital we have been governed by the understanding that the plant will revert to the city authorities in 1905, and for this reason conditions exist which have been tolerated only on this basis.

The cost of water for the last year amounted to \$3.43 per capita. If the State owned the property, it would be economy to establish a water plant of its own. The farm is much too

small, and there is no dairy. Bread has to be purchased ready-made, as there is no bakery. The total per capita cost for the past year, notwithstanding the conditions mentioned, was \$167.04.

Monthly meetings have been held during most of the year and special meetings when necessary. Through its committees and individually all needed visitations have been made to the hospitals, and the board takes pleasure in bearing appreciative testimony to the zeal and efficiency of the superintendents and their respective assistants.

Respectfully submitted.

A. E. ORR

President

EVAN F. SMITH, M. D.

Secretary

REPORT OF THE SUPERINTENDENT—FLATBUSH

To the Board of Managers

Gentlemen.—I respectfully submit the following report of the operations at the Long Island State Hospital, Flatbush, for the year ending September 30, 1901:

On October 1, 1900, the number of patients remaining in the institution was 1,143, of which 387 were men and 756 women. During the year 111 men and 111 women were received on original commitments, and 9 men and 13 women were received by transfer from other similar hospitals. The number discharged during the year was as follows: 22 men and 25 women recovered, 11 men and 16 women improved, 13 men and 15 women unimproved, 1 man and 1 woman not insane, making a total of 47 men and 57 women. The deaths numbered 43 men and 47 women. The number remaining in the hospital at the close of the year was 417 men and 776 women. The total number of patients under treatment was 507 men, 880 women, total 1,387, the average daily population being 1,158.

A new system of admitting patients came into operation at the beginning of the year. Prior to that time it was the custom to receive at this hospital all patients whose residence was in the borough of Brooklyn, but as explained in my report of last year, only about one-third of them could be accommodated here. This made it necessary to transfer a large number to Kings Park, a practice which entailed much work of a routine nature, and which in many instances had an untoward effect upon the patient. Almost all the cases committed from Brooklyn are first brought to the Kings County Hospital by the Department of Charities, where they are retained for a number of days pending examination and commitment. As soon as the latter is completed in accordance with legal requirements, we are notified by the authorities of the County Hospital and nurses are dispatched to conduct the transfer. Hence under the old system those who could not be accommodated here were obliged to be received at two institutions before finally reaching the one in

which they were to be cared for. This created intense apprehension and excitement in many, particularly of the acute class, and no doubt had a retarding influence upon their ultimate recovery. Under the new arrangement, which was suggested by the superintendent at Kings Park and myself and approved by the Lunacy Commission and your honorable board, one-third of the cases so committed have been received at Flatbush and two-thirds of them have gone directly to Kings Park. The change has proved to be a good one so far as I know. It will be seen, however, that the number of patients at Flatbush at the close of the year is 50 in excess of the number at the beginning of the year.

The insanity was of an acute form and presumably recoverable in 101 cases out of the total of 244 received, or 41.5 per cent. The report of the Lunacy Commission for the year ending September 30, 1900, based upon the combined reports of the several State hospitals, shows that of the total admissions that year 48.5 per cent. were classified as presumably recoverable, while for Long Island alone 40 per cent. were so classified. General paralysis, the most fatal of all forms of mental disease, existed in 12.3 per cent. of the admissions, as compared with a general average of 8.14 per cent. received into the several hospitals of the State during the previous year, the proportion at the Long Island hospitals for that year being over 11 per cent. This supports the view that a larger proportion of chronic and hopeless cases comes from large centers of population than from provincial and rural districts. Two cases duly committed were rejected on the ground that they were not insane in the statutory sense. They were women, one being 87 years old, the other 75; their minds had become enfeebled as the result of senility, and no violent or dangerous tendencies were manifest. Another similar case was discharged a few days after admission. A man suffering from hemiplegia and aphasia was also discharged as not being a proper case for an institution of this character, after having been under observation for some days.

Owing to the overcrowded condition of the hospital it has

been difficult to provide for the acute cases that classification and degree of separation which modern psychiatry demands, notwithstanding the comparatively small number of them. This hospital was first opened for the reception of patients in 1852. Each ward was formerly equipped with a special sitting-room and dining-room. With two exceptions the sitting-rooms have been converted into dormitories, likewise a number of the dining-rooms, congregate dining-rooms having been established in the basements; extra beds have also been put in most of the single rooms, and wards originally designed to accommodate twenty patients now contain forty. To what extent this condition of things interferes with the progress towards recovery in those cases in which we may reasonably expect recovery is impossible to say. However, the patients enjoy a remarkable immunity from disease other than insanity. There has been no epidemic of any kind, and no serious accidents have occurred. Six men and seven women were found to have tuberculosis and were transferred to Kings Park. Early in the year all of the patients were vaccinated, smallpox being then prevalent in Brooklyn and New York, but no one in the hospital was attacked by the disease. The excellent quality of our water supply is no doubt an important factor in maintaining the good physical health of those residing in the institution.

The practice of having women nurses on male wards was first established at this hospital five years ago. Seven out of the ten wards for men have the services of a woman, and the result has been a marked improvement from the standpoint of house-keeping and general order, women being proverbially better housekeepers than men. The presence of women on male wards has in many instances a restraining influence upon the patients. The majority of insane men seem to respect a woman and manifest a sense of deference toward her that is not usual in their treatment of men nurses. It has also been a source of satisfaction and comfort to women relatives visiting the men patients, and many of them have spoken about it to the medical officers.

The recovery rate based upon the number admitted is 21 per

cent., which is lower than it was during the three or four years immediately preceding, when the statistics for this hospital were combined with those of Kings Park. This decrease is more apparent than real, and is owing largely to the class of patients retained here prior to the beginning of the year when it was the custom to select about two-thirds of the admissions for transfer to Kings Park. The average rate for all the State hospitals for the year ending September 30, 1900, was 23.7 per cent. The high mortality from general paralysis or paresis (these terms being synonymous) is due to the disproportionately large number afflicted with this disease who were retained here under the old system. As will be seen from the statistical tables appended to this report, out of a total of 90 deaths 24 were due to general paralysis.

Careful attention has again been given to employment and diversion, which is known as the moral or psychic treatment of mental disease, and its efficacy in certain cases has long been recognized. About 50 per cent. of the patients have been employed in the various industrial departments. Religious services have been conducted regularly by the chaplains, the Rev. John Woods and the Rev. C. S. Williams. Outings to Prospect Park and Brighton Beach were given during the summer months.

The following is a list of entertainments given during the year: September 26th, humorous sketches and songs; October 15th, recitations; October 26th, recitations and musical glasses; November 8th, Japanese juggler, comedian and magician; November 24th, projectoscope pictures; November 29th, masquerade ball; December 7th, vocalist, ventriloquist and pianist; December 19th, views of Paris exposition; December 25th, character sketches, comedian and sleight-of-hand performance; January 9th, illustrated lecture on "Ben Hur;" January 23d, phonograph; January 30th, comedian, magician, clown juggler, colored costumed comedians, two lady soloists, violinist; February 13th, Samantha's album; February 22d, Washington tableaux; March 5th, recitations and music; March 16th, reciter, magician and soloist; March 18th, masquerade ball;

April 6th, New York Musical Club; April 17, recitations and music; May 6th, lightning sketch artist; May 7th, 8th, 9th, 10th and 11th, parties of patients attended Forepaugh's circus.

The training school for nurses has been conducted along the same lines as described in last year's report. The graduating class consisted of 11 members and the junior class 12. The annual graduation exercises were held in the entertainment hall May 31st, and an address was delivered by Dr. James M. Winfield.

On May 1st Dr. Caroline M. Stengel, woman assistant physician, was granted a leave of absence for one year, the state of her health being such that a change of climate was deemed expedient. Dr. H. Elizabeth Balch, who had been assistant for over two years at the Long Island Home, Amityville, was appointed to fill the temporary vacancy. Dr. William H. Young, who had held the position of medical interne for about eighteen months, received an appointment as junior assistant at the Hudson River State Hospital on July 8th. No other changes in the staff have occurred.

As will be seen from the treasurer's report, the total expenditure for maintenance was \$193,500.52; the per capita rate being \$167.09 as compared with \$165.02 the previous year. It should be mentioned that in consequence of a change which was made at the beginning of the year in the method of keeping the clothing account, whereby what was known as the "manufacturing fund" was discontinued, over \$2,000 for clothing material which was purchased and used toward the close of the preceding year became a charge upon the year just closed. This practically accounts for the increased per capita cost over the preceding year. Another matter which should be taken into consideration with the cost of maintenance at this hospital is the amount paid annually for water. Our water supply is provided by the Flatbush Water Company, and comes from artesian wells about four miles distant, and the per capita cost of this item alone was \$3.43. The small amount of land under cultivation and the absence of a dairy is also to be remembered in connection with the expenditures for maintenance.

The more important repairs and improvements during the year have been as follows: The windows, guards and cornice of the main building have been painted; also wards 3, 15, 25 and 26. The plumbing in six bathrooms and lavatories in the male department has been renovated and modern fixtures installed. The road leading from Albany avenue to the rear grounds, about 150 yards in length, has been paved. Some 250 feet of hedge has been planted on the east side of the annex grounds where there was formerly a high board fence. A cement floor has been laid in the annex laundry. Three hundred new spring beds have been provided to take the place of old ones which were of inferior make and without springs.

Concerning the requirements for another year, I would call attention especially to the urgent necessity for painting the outside brick work of the main building and kitchen. Many parts need to be pointed with mortar, and two coats of paint should be put on to prevent further deterioration, the cost of which would not exceed \$2,000. The outbuildings, consisting of three wooden structures now used for shops, are in such a state of decay and dilapidation as to be beyond repair, and their situation is such that they should be abolished and a building erected on a more suitable site at a cost of about \$1,000. Attention is again called to the importance of having an interior telephone system, the installation of which would cost not more than \$600.

Contributions of magazines and other reading matter have been received from the following ladies and gentlemen:

Mrs. J. H. Walling, 635 Hancock street, Brooklyn.

Mr. W. T. Daniels, 512 Hancock street, Brooklyn.

Mrs. Farquharson, 23 Spencer place, Brooklyn.

Mrs. M. E. Riley, 84 State street, Brooklyn.

Mrs. Frank Cordman, 796 President street, Brooklyn.

Mrs. D. Y. Bayly, 821A Union street, Brooklyn.

Mrs. A. J. Holly, 177 East Twelfth street, Flatbush.

Miss Hook, 38 Herkimer street, Brooklyn.

Mr. S. G. Stanley, 1609 Beverley road, Brooklyn.

Mrs. S. G. Taylor, 741 Marcy avenue, Brooklyn.

Mrs. Knox, 104 Willow street, Brooklyn.

Mrs. Hanly, 1068 Dean street, Brooklyn.

Mrs. D. D. Whitney, Jr., 18 Cambridge place, Brooklyn.

Mrs. Crommelin, 719 Monroe street, Brooklyn.

Mr. G. Cantor, 54 Putnam avenue, Brooklyn.

Miss Louise B. McFerters, 457 Franklin avenue, Brooklyn.

Mr. John P. Walker, 140A Hull street, Brooklyn.

Engine Company No. 140, Prospect avenue, Brooklyn.

Mrs. W. H. Hurd, 743 DeKalb avenue, Brooklyn.

Mrs. J. F. Booth, 1041 Bergen street, Brooklyn.

Miss Kneeland, 103 McDonough street, Brooklyn.

Mrs. Moore, 64 Hoyt street, Brooklyn.

Mrs. C. C. Irish, 302 Garfield place, Brooklyn.

Mrs. J. A. Townsend, Eightieth street, near Third avenue, Brooklyn.

Mrs. Nelson, 878 Flatbush avenue, Brooklyn.

Proprietors of the Brooklyn Citizen.

Proprietors of the Irish World.

Proprietors of the Catholic News.

The official visits of the State Commission in Lunacy were made in November and June. Upon my invitation the summer meeting of the Brooklyn Neurological Society was held at the hospital on June 27th, and the various departments were inspected by the gentlemen present on that occasion.

For the continued support and assistance rendered me by the members of your board and the State Commission in Lunacy in conducting the affairs of the hospital I take this opportunity to express my grateful appreciation.

ROBERT M. ELLIOTT

Superintendent

November 18, 1901

The following reports of the several industrial departments show the number of articles made and repaired:

REPORT FROM SEWING ROOM, YEAR ENDING SEPTEMBER 30,
1901

Aprons, white	1,270
Aprons, colored	462
Aprons, cooks'	609
Aprons, operating	6
Bibs	228
Bags, clothes	2
Bags, shoe	22
Bandaging, yards	1,754
Curtains, window, pairs.....	234½
Curtains, clothes	30
Curtain bands	267
Chemises	1,031
Cover pillows	29
Cover chairs	4
Caps, night	6
Covers, meat	13
Covers, bureau	14
Caps, operating	10
Curtains, bookcase	3
Cushion covers	3
Covers, side board.....	3
Camisoles	7
Cloths, wash (crocheted).....	6
Collars, linen	16
Dresses	1,125
Dresses, strong	143
Dresses, cashmere	20
Dresses, challie	12
Dresses, bathing	34
Dressing gowns (women's).....	58
Dressing gowns (men's).....	34

Dresses, masquerade	16
Doilies	40
Drawers	291
Handkerchiefs	474
Head rests, cretonne.....	151
Mattresses	526
Napkins, hemmed	208
Neckties	403
Nightgowns	251
Pillow slips	1,913
Pillow ticks	20
Sheets	2,939
Sheets, restraint	15
Suspenders, pair	139
Skirts, canton flannel.....	130
Skirts, muslin	99
Skirts, flannel	82
Skirt, cashmere	1
Skirts, crash	4
Skirts, duck	6
Shirts, colored	1,055
Shirts, white	156
Shirts, night, unbleached.....	475
Shirts, night, outing flannel.....	373
Shrouds	200
Shades, hemmed	278
Screens covered	6
Squares, clothes	67
Shirt waists	16
Slippers, pairs	90
Sacques, laundry	32
Table cloths	586
Towels, bath	4,052
Towels, roller	943
Towels, hand	1,036

Towels, dish	2,898
Table pads	3
Table covers, cretonne.....	31
Table covers, crocheted.....	14
Tidies, crocheted	88
Lace, crocheted, yards	115½
Underwear, men's suits.....	6
Underwaists	33
Table cover (for billiard table).....	1
Pieces repaired	54,967
Wash cloths (from old bedspreads).....	400
Straw ticks (from condemned mattresses).....	235
Aprons, ticking (from condemned mattresses).....	25
Napkins (from condemned tablecloths).....	325
Iron holders (from scraps).....	734
Dressing sacques (from Kings County Hospital, skirts)	42
Dresses remodelled (from Kings County Hospital, dresses)	30
Dresses, baby	10
Skirts, baby	6
Nightgowns, baby	4
Blanket, baby	1
Diapers, baby	20

NURSES UNIFORM MATERIALS MADE UP

Aprons	422
Dresses	173
Caps	1,259
Straps (apron) pairs.....	415
Sleeves, pairs	3
Skirts	2
Waists	90

REPORT OF TAILOR SHOP, YEAR ENDING SEPTEMBER
30, 1901

Coats, over	4
Coats	312
Coats, duck	133
Jumpers	155
Overalls	178
Pants	637
Pants, duck	108
Vests	303
Pieces pressed and repaired.....	1,563

REPORT OF SHOE SHOP, YEAR ENDING SEPTEMBER
30, 1901

Shoes, repaired, pairs.....	1,234
Boots, rubber, repaired, pairs.....	19
Slippers, repaired, pairs	23
Hame straps, made.....	20
Breeching straps, made.....	16
Drum straps, made.....	20
Saddles, repaired	15
Collars, breast, repaired	22
Breeching, repaired	20
Headstalls, repaired	22
Blinders, repaired	23
Traces, repaired, pairs.....	25
Tugs, repaired	12
Bellybands, repaired	10
Reins, repaired, pairs.....	20
Surrey guard, repaired	1

REPORT OF WORKSHOP, YEAR ENDING SEPTEMBER 30, 1901

Mattresses	561
Pillows	139
Brooms, dozen.....	45
Carpet, rag, made, yards.....	304
Brushes, dust, dozen.....	5
Brushes, shoe, dozen.....	3
Brushes, scrub, dozen.....	57
Brooms, whisk, dozen.....	4
Brushes, floor, dozen.....	2
Chairs caned	26
Settee caned	1
Seats, window, upholstered.....	2
Box upholstered	1
Chairs upholstered	6
Couches upholstered	2
Cushions made	4
Clocks repaired	20
Baskets repaired	9
Baskets, waste	4
Head rests	50
Mats, cocoa	6

CARPENTER'S REPORT, YEAR ENDING SEPTEMBER 30, 1901

Boxes	70
Brush backs	7
Barrows, hand	2
Brackets	3
Bookcase	1
Benches	4
Beads, stop, for windows.....	150
Boards, cutting	4
Cabinet	1

Coffins	18
Drawer	1
Screens, door	4
Markers, grave	6
Gauge stands	4
Handles	20
Boards, ironing	2
Keys made	11
Mould, solder	1
Mops, floor	3
Packing tools	3
Parting strips	150
Pot sticks	2
Racks, floor	3
Shelves	17
Springs for locks.....	200
Shades	216
Shutters	2
Screens for windows	24
Steps	3
Stakes, wagon	4
Sash	7
Screen, three-leaf	1
Stand, flower	1
Trucks for laundry.....	9
Tub for laundry	1
Tables	2
Templet	1
Washers, wood	12

GARDEN PRODUCTS, YEAR ENDING SEPTEMBER 30, 1901

Asparagus, 158 bunches.....	\$31 60
Beets, 284 bushels.....	178 89
Beets tops, 15 barrels.....	15 00
Beans, lima, 15 bushels.....	18 13
Beans, string, 172 bushels.....	154 33

Cabbage, 7,463 heads.....	\$239 93
Carrots, 36½ bushels.....	19 65
Corn, 728 2-3 dozen.....	87 44
Celery, 867 bunches.....	130 05
Cauliflower, 58 heads.....	1 74
Cucumbers, 1,010	10 10
Egg plant, 455.....	28 44
Kale, 212½ barrels.....	88 53
Leeks, 1,630 bunches.....	25 88
Lettuce, 49 5-6 barrels.....	60 82
Onions, late, 9 bushels.....	6 63
Onions, young, 374 bunches.....	12 34
Peas, 70 bushels.....	42 00
Parsley, 667 bunches.....	20 13
Pumpkins, 12	1 20
Peppers, 3 pecks.....	60
Potatoes, 35 barrels.....	58 00
Parsnips, 34 barrels.....	34 00
Rhubarb, 5,941 bunches.....	89 11
Radishes, 4,715 bunches.....	47 15
Radish, horse, 28 bunches.....	1 94
Spinach, 192 bushels.....	60 75
Squash, 182.....	9 10
Strawberries, 367 quarts.....	29 36
Tomatoes, 225¼ bushels.....	112 63
Tomatoes, green, 6 bushels.....	1 80
Turnips, 146 bushels.....	55 70
Milk, 3,517½ quarts	134 79
Manure, horse and cow, 100 tons.....	125 00

\$1,932 76

REPORT OF FARM STOCK ON HAND

Horses	6
Cow	1
Wagonette, with pole.....	1
Surreys, with pole.....	2

Phaeton, single	1
Truck	1
Cart, dump	1
Wagon, delivery	1
Cart, sprinkling	1
Sleigh	1
<hr/>	
Number of pieces laundered during the year.....	1,343,148
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MOVEMENT OF POPULATION

Deaths:

On number admitted (exclusive of transfers).....	40.54
On average daily population.....	7.77
On whole number treated.....	6.49
On number discharged.....	46.39
<hr/>	

Recoveries:

On number admitted (exclusive of transfers).....	21.17
On average daily population.....	4.06
On whole number treated.....	3.39
On number discharged.....	24.23
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MEDICAL SERVICE

Number of physicians.....	6
Ratio of physicians to patients.....	1 to 193
Annual per capita cost of medical service.....	\$8.651
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EMPLOYEES

Total number of employees.....	220
Ratio of all employees to patients.....	1 to 5.26
Ratio of attendants to patients.....	1 to 7.568
Annual per capita cost of employees.....	\$55.0115
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FUEL AND LIGHT

Total annual cost.....	\$9,801 80
Annual per capita cost.....	8.464
Number tons consumed.....	2,706 ²⁶⁵ / ₂₂₄₀
Average purchase price.....	\$3.621
<hr/>	

STATEMENT SHOWING AVERAGE PURCHASE PRICE, ETC.

	Av. purchase price	Annual per capita cost
Fresh meats, per pound.....	\$0.07203	\$11.915
Poultry .....	.11307	.4198
Wheat flour, per barrel.....	3.943	.3881
Butter .....	.20574	7.357
Cheese .....	.07607	.6548
Milk, liquid, per gallon.....	.15	2.362
Eggs .....	.1653	2.56
Tea .....	.2413	.811
Coffee .....	.1172	1.432
Sugar, cwt.	5.35	2.498
Liquors, distilled, per gallon.....	1.725	.129
		<hr/>
Average purchase price milk, condensed, per quart..		\$0.1245
Annual per capita cost milk, condensed, per patient.		3.924
Average purchase price bread, per pound.....		.025
Annual per capita cost bread, per patient.....		8.198
		<hr/>

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900	387	756	1,143
Admitted during year ending Sept. 30, 1901:			
On original commitments:			
From residences.....	108	109	217
By transfers from county houses.	3	2	5
By transfers from other institutions for insane	9	13	22
Total number under treatment during year	507	880	1,387
Daily average population.....	391	767	1,158
Capacity of institution.....	370	718	1,088
Discharged during the year:			
As recovered.....	22	25	47
As improved.....	11	16	27
As unimproved.....	13	15	28
As not insane	1	1	2
Died	43	47	90
Whole number discharged during the year..	90	104	194
Remaining October 1, 1901.....	417	776	1,193

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	1895
Total acreage of grounds and buildings	30 acres
Value of real estate, including buildings....	• *
Value of personal property	\$78,570 34
Acreage under cultivation	12 acres

Receipts during year, maintenance fund:

Balance on hand October 1, 1900.	\$1,294 56
From State Treasurer for maintenance on estimates 1 to 12, inclusive	189,872 63
For reimbursing patients	8,982 80
From all other sources	7,474 08

Total receipts for maintenance..... \$207,624 07

Total receipts from State Commission in
Lunacy for extraordinary improvements ... 6,394 16

Total receipts from manufacturing fund 965 48

Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries.....	\$13,813 67
Estimate No. 2. For wages	63,703 34
Estimate No. 3. For provisions and stores.....	74,635 27
Estimate No. 4. For ordinary repairs.....	3,284 14
Estimate No. 5. For farm and grounds	1,811 27
Estimate No. 6. For clothing	7,810 50
Estimate No. 7. For furniture and bedding	6,442 92
Estimate No. 8. For books and stationery.....	1,596 40
Estimate No. 9. For fuel and light....	10,506 52
Estimate No. 10. For medical supplies	1,451 34
Estimate No. 11. For miscellaneous expenses....	7,516 58
Estimate No. 12. For transportation	928 57

Total disbursements, estimates 1 to 12, inclusive \$193,500 52

* Property of Kings county; temporarily leased.

Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	\$6,394 16
Total disbursements during year, manufacturing fund.....	213 33
Remitted to State Treasurer, sundry receipts, Chap. 580, Laws 1899.....	9,284 55
<hr/> <hr/>	
Balances October 1, 1901:	
General maintenance fund.....	\$4,227 08
Apportionments by State Commission in Lunacy for extraordinary improvements	5,464 30
Manufacturing fund	2,565 75
<hr/> <hr/>	
Weekly per capita cost on daily average number of patients, estimates 1 to 12, inclusive.....	3.213
<hr/> <hr/>	
Maximum rate of wages paid attendants:	
Men	\$30 00
Women	25 00
Minimum rate of wages paid attendants:	
Men.....	20 00
Women	14 00
<hr/> <hr/>	
Proportion of day attendants to average daily population.....	1 to 9.84
Proportion of night attendants to average daily population	1 to 25
Percentage of daily patient population engaged in some kind of useful occupation.....	50.1
<hr/> <hr/>	
Estimated value of farm and garden products during year.....	\$1,807 76
Estimated value of articles made or manufactured by patients during year.....	3,017 16
<hr/> <hr/>	

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPO- TION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.) ...	5	10	15	.....	5	5	3
Mental strain, worry and overwork (not included in above)	6	9	15	3	1	4	1
Religious excitement.		2	2	.....	1	1	....
Love affairs (including seduction)		3	3	.....	1	1	...
Fright and nervous shock	3	3	6	1	.....	1	1
Physical:							
Intemperance	14	3	17	1	1	2	1
Venereal diseases ..	5	2	7	.....	.....	.....	1
Masturbation	2	.....	2	1	.....	1	.....
Sunstroke	3	2	5	.....	2	2	.....
Accident or injury..	10	.....	10	1	.....	1	1
Pregnancy		1	1	.....	.....	.....	.....
Parturition and puerperium		4	4	.....	.....	.....	1
Change of life		13	13	.....	3	3	.....
Fevers		1	1	.....	.....	.....	.....
Privation and over- work		3	3	.....	1	1	.....
Epilepsy	1	1	2	.....	.....	.....	.....
Diseases of skull and brain	3	1	4	.....	.....	.....	.....
Old age	2	10	12	.....	1	1	6
Abuse of drugs .....	.....	1	1	.....	1	1	.....
All other bodily dis- orders and ill- health	3	16	19	1	.....	1	.....
Heredity	2	.....	2	2	.....	2	.....
Congenital defect....	1	1	2	.....	.....	.....	1
Unascertained	59	37	96	6	2	8	45
Not insane	1	1	2	.....	.....	.....	2
Total	120	124	244	16	19	35	63

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901 and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious.	1	.....	.....	17	.....	17
Mania, acute.....	54	15	1	1,360	624	151
Mania, recurrent.....	3	3	.....	126	82	7
Mania, chronic.....	7	.....	.....	699	51	185
Melancholia, acute....	44	25	2	1,514	573	229
Melancholia, simple....	.....	.....	.....	22	10	2
Melancholia, chronic..	10	3	6	515	102	175
Alternating (circular) insanity.....	.....	.....	.....	10	1	.....
Paranoia.....	30	.....	2	207	.....	18
General paralysis.....	30	.....	24	599	.....	440
Dementia, primary....	2	.....	1	527	87	273
Dementia, terminal...	52	1	42	1,251	18	1,045
Epilepsy with insanity.	5	....	11	324	21	186
Imbecility with mani- acal attacks.....	4	.....	1	97	3	34
Idiocy.....	.....	.....	.....	13	.....	5
Not insane*.....	2	.....	.....	43	.....	1
Unclassified.....	.....	.....	.....	900	.....	.....
Total.....	244	47	90	8,224	1,572	2,768

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901					SINCE OCTOBER 1, 1888						
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	8	10	18	...	...	...	168	225	393	46	16	62
One to three months.	6	6	12	5	5	10	187	204	391	160	120	280
Three to six months.	3	4	7	8	9	17	71	78	149	229	241	470
Six to nine months. . . . .	...	1	1	3	6	9	30	30	60	134	159	293
Nine months to one year. . . . .	...	...	...	...	2	2	9	13	22	75	97	172
One year to eighteen months. . . . .	...	1	1	3	1	4	20	15	35	74	87	161
Eighteen months to two years. . . . .	...	...	...	...	...	...	8	2	10	17	19	36
Two to three years.	1	...	1	...	1	1	8	8	16	12	18	30
Three to four years. . . . .	...	...	...	1	1	2	9	5	14	13	8	21
Four to five years. . . . .	...	...	...	...	...	...	6	2	8	9	6	15
Five to ten years. . . . .	...	...	...	2	...	2	7	4	11	16	8	24
Ten to twenty years. . . . .	...	...	...	...	...	...	2	3	5	2	3	5
Thirty to forty years. . . . .	...	...	...	...	...	...	...	...	...	1	...	1
Unascertained	4	3	7	...	...	...	263	193	456	...	...	...
Total	22	25	47	22	25	47	788	782	1,570	788	782	1,570

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases:						
Typhoid fever.....				24	16	40
Measles.....					1	1
Mumps.....					2	2
Smallpox.....				1	2	3
Influenza.....		1	1	1	2	3
Erysipelas.....				5	3	8
Septicemia and pyemia.....				8	13	21
Dysentery.....	1	2	3	28	43	71
Syphilis.....				4		4
Tuberculosis.....		1	1	225	271	496
Constitutional diseases:						
Rheumatism (or rheumatic affections).....					1	1
Diabetes mellitus and diabetes insipidus...				2	3	5
Scurvy, purpura and haemophila.....				1	2	3
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and oesophagus.....					2	2
Diseases of the stomach.....				8	10	18
Diseases of the intestines.....	2	4	6	60	86	146
Diseases of the liver...	1	2	3	2	9	11
Diseases of the peritoneum.....				5	1	6
Diseases of the respiratory system:						
Diseases of the bronchi.....				8	1	9
Diseases of the lungs...		2	2	73	79	152
Diseases of the pleura..	1	1	2	2	3	5
Diseases of the circulatory system:						
Diseases of the pericardium.....					5	5
Diseases of the heart...	6	10	16	148	155	303
Arterio-sclerosis.....				10	11	21
Aneurism.....				1	1	2

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the blood and ductless glands:						
Anemia, pernicious anemia and leukamia.				1	1	2
Diseases of the genito-urinary system. . . .	2	2	4	53	71	124
Diseases of the nervous system:						
Diseases of the nerves.		1	1	1	1	2
Diseases of the spinal cord.	1		1	3	2	5
Diseases of the meninges.	1		1	9	7	16
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions).	2	5	7	101	97	198
Functional nervous diseases (paralysis agitans, chorea, eclampsia, hysteria, neurasthenia)					1	1
Epilepsy.	4	3	7	80	56	136
Mental diseases:						
Exhaustion of acute mental disease.	1	1	2	135	205	340
Exhaustion of chronic mental disease.		2	2	9	9	18
General paralysis of the insane.	21	3	24	323	47	370
Heat stroke.		2	2		2	2
Obesity.					1	1
Debility of old age.		5	5	43	78	121
Accident.				13	5	18
Suicide.				1	1	2
Surgical and gynecological diseases and diseases of the skin.				16	19	35
Malignant new growths or cancer.				14	25	39
Total.	43	47	90	1418	1350	2768

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during
the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	4	5	9	149	198	347
Maternal branch.....	6	3	9	190	207	397
Paternal and maternal branches.....	2	1	3	30	46	76
Collateral branches...	4	10	14	209	260	469
No hereditary tendency	70	76	146	1,475	1,252	2,727
Unascertained.....	34	29	63	1,943	2,265	4,208
Total.....	120	124	244	3,996	4,228	8,224

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	55	51	106	1,735	1,329	3,064
Married	51	55	106	1,599	1,605	3,204
Widowed	13	18	31	355	649	1,004
Divorced					5	5
Unascertained	1		1	307	640	947
Total	120	124	244	3,996	4,228	8,224

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate		3	2	86	14	100
Academic	5	2	7	75	62	137
Common school	94	72	166	1,822	1,542	3,364
Read and write	4	7	11	468	418	886
Read only	1	4	5	145	186	331
No education	9	11	20	182	302	484
Unascertained	7	25	32	1,218	1,704	2,922
Total	120	124	244	3,996	4,228	8,224

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901				SINCE OCTOBER 1, 1888			
	DURATION PREVIOUS TO ADMISSION		PERIOD UNDER TREATMENT		DURATION PREVIOUS TO ADMISSION		PERIOD UNDER TREATMENT	
	Men	Women	Total		Men	Women	Total	
Under one month	2	7	9	3	2	5	7	179
One to three months	6	6	12	9	154	13	167	148
Three to six months	2	2	4	.....	114	80	194	180
Six to nine months	3	1	4	1	82	49	131	160
Nine months to one year....	1	1	2	3	40	20	60	109
One year to eighteen months..	3	2	5	8	93	45	138	87
Eighteen months to two years..	1	1	2	5	33	24	57	146
Two to three years	4	4	8	2	61	46	107	71
Three to four years	1	2	3	2	25	32	57	126
Four to six years	1	3	4	5	19	38	57	69
Six to ten years	1	5	6	2	27	32	59	71
Ten to twenty years .....	.....	.....	.....	2	23	26	49	101
Twenty years and over .....	.....	.....	.....	1	8	9	17	74
Not insane* .....	.....	.....	.....	.....	.....	1	1	45
Unascertained	18	13	31	.....	645	695	1,340	.....
Total	43	47	90	43	1,418	1,350	2,768	1,418
Average duration of insane life (giving years and tenths)				3.9				7.7
				6.1				6.2

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years ..	.....	.....	.....	1	.....	1
From 10 to 15 years ..	1	.....	1	19	8	27
From 15 to 20 years ..	2	5	7	178	166	344
From 20 to 25 years ..	13	20	33	461	425	886
From 25 to 30 years ..	17	14	31	494	523	1,017
From 30 to 35 years ..	19	12	31	516	511	1,027
From 35 to 40 years ..	19	15	34	502	429	931
From 40 to 50 years ..	22	22	44	659	606	1,265
From 50 to 60 years ..	16	16	32	408	415	823
From 60 to 70 years ..	8	11	19	295	302	597
From 70 to 80 years ..	2	8	10	138	166	304
From 80 to 90 years ..	1	1	2	42	45	87
Unascertained .....	.....	.....	.....	283	632	915
Total	120	124	244	3,996	4,228	8,224

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years ..	3	.....	3	71	49	120
From 20 to 30 years ..	6	8	14	244	299	543
From 30 to 40 years ..	6	6	12	222	222	444
From 40 to 50 years ..	4	7	11	135	130	265
From 50 to 60 years ..	1	3	4	74	51	125
From 60 to 70 years ..	1	1	2	26	25	51
From 70 to 80 years ..	1	.....	1	4	1	5
Unascertained .....	.....	.....	.....	12	5	17
Total	22	25	47	788	782	1,570

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years..				3	2	5
From 15 to 20 years..				18	24	42
From 20 to 25 years..	1	1	2	63	54	117
From 25 to 30 years..	1	1	2	97	96	193
From 30 to 35 years..	5	1	6	124	112	236
From 35 to 40 years..	5	5	10	182	117	299
From 40 to 50 years..	8	6	14	304	242	546
From 50 to 60 years..	11	7	18	239	235	474
From 60 to 70 years..	9	14	23	232	270	502
From 70 to 80 years..	3	11	14	123	148	271
From 80 to 90 years..		1	1	28	48	76
Unascertained				5	2	7
Total	43	47	90	1,418	1,350	2,768

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month.....	20	28	48
One to three months.....	13	23	36
Three to six months.....	11	12	23
Six to nine months.....	11	9	20
Nine months to one year.....	1	1	2
One year to eighteen months.....	7	7	14
Eighteen months to two years.....	4	4	8
Two to three years.....	8	7	15
Three to four years.....	5	3	8
Four to five years.....	2	3	5
Five to ten years.....	12	7	19
Ten to fifteen years.....	1	2	3
Fifteen to twenty years.....		1	1
Thirty years and upwards.....		1	1
Not insane*.....	1	1	2
Unascertained.....	24	15	39
Total	120	124	244

*Includes cases of alcoholism, morphia habit, etc.

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.....	22	22	44
One to three months.....	10	10	20
Three to six months.....	29	18	47
Six to nine months.....	17	37	54
Nine months to one year.....	15	14	29
One year to eighteen months.....	16	6	22
Eighteen months to two years.....	14	21	35
Two to three years.....	34	49	83
Three to four years.....	21	38	59
Four to five years.....	40	71	111
Five to ten years.....	104	240	344
Ten to fifteen years.....	33	110	143
Fifteen to twenty years.....	23	66	89
Twenty to thirty years.....	33	62	95
Thirty years and upwards.....	6	12	18
Total	417	776	1,193

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.....	4	.....	4	125	11	136
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc....	19	.....	19	641	2	643
Agricultural and pastoral:						
Farmers, gardeners, herdsmen, etc.....	7	.....	7	94	.....	94
Mechanics at outdoor vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc.....	16	.....	16	569	.....	569
Mechanics, etc., at sedentary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	25	.....	25	717	2	719
Domestic service:						
Waiters, cooks, servants, etc.....	6	62	68	116	1,091	1,207

Educational and higher domestic duties:						
Governesses, teachers, students, housekeepers, nurses, etc.....	.....	47	47	26	1,948	1,974
Commercial:						
Shopkeepers, saleswomen, stenographers, typewriters, etc.....	.....	.....	.....	22	37	59
Employed in sedentary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, etc. ....	.....	9	9	75	267	342
Miners, seamen, etc.....	3	.....	3	81	.....	81
Laborers	36	.....	36	997	.....	997
No occupation	3	4	7	182	192	374
Unascertained	1	2	3	351	678	1,029
Total	120	124	244	3,996	4,228	8,224

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Arabia				1		1
Austria	2		2	31	22	53
Australia				2	2	4
Africa	1		1	1	2	3
Azores (Portugal)					1	1
Bavaria				5		5
Belgium				4		4
Bohemia		1	1		1	1
Born at sea				1		1
Canada	1	1	2	53	34	87
Canary Islands				2		2
China				10		10
Corsica				1		1
Denmark	1		1	15	13	28
England	2	3	5	155	136	291
Finland				6	4	10
France				19	20	39
Germany	23	18	41	569	549	1,118
Greece				1		1
Holland		1	1	4	5	9
Hungary				19	15	34
Iceland				1	1	2
India					1	1
Ireland	16	27	43	665	994	1,659
Italy	3	2	5	61	40	101
Japan				3	1	4
Madeira					1	1
Mexico				1		1
Norway		3	3	46	36	82
Newfoundland					1	1
Nova Scotia				2	1	3
Poland	1		1	26	21	47
Prussia		1	1		1	1
Roumania	1		1	7		7
Russia	2	7	9	54	72	126
South America				2	1	3
Shinnecock Indian					1	1

Table No. 18—(Concluded)

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Scotland	3	.....	3	50	35	85
Spain .....	.....	.....	.....	7	2	9
Sweden	5	4	9	69	87	156
Switzerland .....	.....	.....	.....	15	8	23
Turkey .....	.....	.....	.....	2	3	5
United States	58	55	113	1,773	1,468	3,241
Wales .....	.....	.....	.....	3	4	7
West Indies .....	.....	.....	.....	12	10	22
Unascertained	1	1	2	298	635	933
Total	120	124	244	3,996	4,228	8,224

Of the total number admitted since the 1st of October, 1888, the parents of 72.53 per cent were both of foreign birth.

In 3.67 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 1.73 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany			
Allegany			
Broome			
Cattaraugus			
Cayuga			
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland			
Delaware			
Dutchess			
Erie			
Essex			
Franklin			
Fulton			
Genesee			
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings	216		216
Lewis			
Livingston			
Madison			
Monroe			
Montgomery			
Nassau	4		4
New York	1		1
Niagara			
Oneida			
Onondaga			
Ontario			
Orange			
Orleans			
Oswego			
Otsego			
Putnam			
Queens	3		3
Rensselaer			
Richmond			
Rockland			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
St Lawrence.....			
Saratoga.....			
Schenectady.....			
Schoharie.....			
Schuyler.....			
Seneca.....			
Steuben.....			
Suffolk.....	20		20
Sullivan.....			
Tioga.....			
Tompkins.....			
Ulster.....			
Warren.....			
Washington.....			
Wayne.....			
Westchester.....			
Wyoming.....			
Yates.....			
State patients.....			
Soldiers' Home.....			
Total.....	244		244

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	PUBLIC		
	Men	Women	Total
Albany			
Allegany			
Broome			
Cattaraugus			
Cayuga			
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland			
Delaware			
Dutchess			
Erie			
Essex			
Franklin			
Fulton			
Genesee			
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings	399	747	1,146
Lewis			
Livingston			
Madison			
Monroe			
Montgomery			
Nassau	3	3	6
New York	1	7	8
Niagara			
Oneida			
Onondaga			
Ontario			
Orange			
Orleans			
Oswego			
Otsego			

Table 20—(Concluded)

COUNTIES	PUBLIC		
	Men	Women	Total
Putnam.....			
Queens.....	5	9	14
Rensselaer.....			
Richmond.....			
Rockland.....			
St. Lawrence.....			
Saratoga.....			
Schenectady.....			
Schoharie.....			
Schuyler.....			
Seneca.....			
Steuben.....			
Suffolk.....	8	8	16
Sullivan.....			
Tioga.....			
Tompkins.....			
Ulster.....			
Warren.....			
Washington.....			
Wayne.....			
Westchester.....		1	1
Wyoming.....			
Yates.....			
Unascertained.....			
Total.....	417	776	1,193

SIXTH ANNUAL REPORT
OF THE
LONG ISLAND STATE HOSPITALS
KINGS PARK
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

REPORT OF THE SUPERINTENDENT OF THE LONG ISLAND STATE HOSPITAL AT KINGS PARK

To the Board of Managers

I have the honor to submit herewith the sixth annual report of the Long Island State Hospital at Kings Park for the year ending September 30, 1901:

MOVEMENTS OF POPULATION

	Men	Women	Total
Number of patients remaining in hospital October 1, 1900	1,198	1,528	2,726
Number admitted during year.....	233	248	481
Number discharged recovered	68	67	135
Number discharged improved	27	37	64
Number discharged unimproved	12	6	18
Number discharged not insane	3	1	4
Died.	108	96	204
Total number discharged, including deaths.	218	207	425
Daily average population.....	1,217	1,566	2,783
Number remaining October 1, 1901.....	1,213	1,569	2,782
	=====	=====	=====

Of the total number of admissions during the year, namely, 481, 28 were transfers from other hospitals, 445 were direct admissions from residences and from the Kings County Hospital and 8 were transfers from county poorhouses.

Of the number discharged, 8 were deported to their homes in Europe and 7 sent to their homes in other States.

GENERAL CONDITIONS

The general health of the patients and employees has been good. There have been four cases of typhoid fever, all employees. No fatal accidents have occurred. Several attempts at suicide have been made at the hospital, none of which have been successful, but one patient while on a 30-day parole committed suicide by means of arsenical poisoning. The patient was apparently recovered when she left the hospital. Becoming despondent after two weeks, her depression was noticed by her friends, but they failed to take the obviously proper course of returning her to the hospital. They also failed to notify the hospital of her condition.

The overcrowding noted in my last annual report has continued and become worse. This overcrowding will be relieved to a certain extent when the new employees' home shall be occupied, and it is also understood that it will be relieved by transfers to Central Islip.

I desire again to call attention to the value to the hospital of our employees' club and to reiterate what I said last year—that the raising of the standard among our employees has resulted largely from the fact that a convenient and comfortable home where they have been able to spend their time when off duty is provided by the club. I also desire to state that any measures taken for the comfort and welfare of our employees are repaid tenfold in the improved care of our patients, which is sure to result from obtaining a better class of employees, and, therefore, more intelligent and considerate treatment.

During the past year a new arrangement for receiving patients committed from Kings county has been in vogue. Up to last year all such cases were first received at what is now the Long Island State Hospital at Flatbush, but during the past year we have received two-thirds of all cases committed in Kings county at this hospital direct, without any period of detention at Flatbush. It was formerly feared by some that it would be impossible to bring the more acute cases direct to Kings Park without detriment. The contrary has been the

case. Our system of reception from the Kings County Hospital has been to take 100 consecutive cases; then 50 consecutive cases are received at the Long Island State Hospital at Flatbush; then we receive 100 consecutive cases, and so on. For the transfer of these cases the Long Island Railroad has provided a special compartment in two of their passenger coaches. These passenger coaches are placed on any of the trains running between Brooklyn, Long Island City and Kings Park whenever the hospital desires them; thus privacy is secured and freedom from annoyance to other passengers. No serious difficulty has been experienced in making these transfers in this manner, and, as above noted, no detriment to any acute case has been apparent. Cases of exceeding physical weakness have been transferred not only from Kings County Hospital, but from their homes in Brooklyn, without difficulty and without apparent detriment to the patient.

Our recovery rate on admissions for the past year is over 30 per cent. I refer to our recovery rate merely to state that the greatest care has been observed in reporting cases as recoveries. I believe that a conservative attitude has been taken and maintained in this matter, and that no cases have been reported as recovered except those which we have had every reason to regard as recovered. Naturally some cases relapsed, but the number of such cases has not been excessive.

The training school has been carried on as usual during the past year and a great deal of interest has been shown in the work. More and more attention is constantly being paid to practical bedside teaching and the observation and recording of symptoms with extended attendance on the sick. Last May the entire senior class of eleven persons passed the final examination and received diplomas entitling them to rank as nurses. The present senior class consists of nineteen members. At the recent entrance examination twenty-nine applicants were successful and now form the junior class.

In our statistical table No. 18, showing the nativity of patients admitted during the past year, it may be interesting to

note that about one-half our admissions are native born. Of the remainder who are foreign born, one-third are from Ireland and one-fourth from Germany; then in order follow Russia, Sweden, Italy, England, etc.

In table No. 3, showing the assigned causes of insanity, where a cause was ascertainable, in cases admitted during the past year it may be noted that alcoholic intemperance leads all other causes of mental disturbance. Then follow in order adverse conditions, such as loss of friends and business trouble; mental strain, worry, and overwork, not included in the above; heredity, old age, parturition and the puerperal state; accident or injury, fright and nervous shock, epilepsy, etc. It should, however, be observed that the difficulty of obtaining a satisfactory statement of the conditions preceding mental alienation is so great in many cases that most statistics of this character are not of great value. An attempt, however, is made at this hospital to obtain statements with regard to mental and physical conditions and heredity from all reliable sources. We correspond with any reliable person, firm or institution that we are able to learn have had relations with the persons coming to the hospital as patients. At best, however, such information is meagre and unsatisfactory.

MATERIAL IMPROVEMENTS

The road making and grading about the new group have been continued and a large amount of work has been accomplished during the past year. This includes the covering of several acres of land with loam after being graded, the moving of many thousand loads of soil, and construction of stone gutters and catch-basins for drainage. A large amount of this work has also been done in the neighborhood of the new auxiliary boiler house, where considerable difficulty has been experienced in protecting this building from serious washouts during heavy rains.

The extensive terraces in the neighborhood of the old boiler house have been completed, and additional grading in this vicinity is well under way.

A new path with stone gutters and catch-basins has been constructed between the woman's cottages and the boulevard.

New roads with stone gutters and catch-basins have been constructed in the rear of the men's cottages.

Stone gutters and catch-basins have also been built in other portions of the place where they seemed to be necessary in so far as material has been available.

A new summer house has been erected in the grove opposite the new group. The grove has been trimmed up in this vicinity and rustic seats provided, making this part of the grove attractive for employees and paroled patients.

Portions of the boulevard have been covered with crushed stone, well rolled by the aid of our new road roller.

With a few unimportant exceptions the following is a statement of the work which has been accomplished on special fund appropriations and by contract:

Several of our wards and cottages have been provided with necessary accommodations for caring for clothing, suitable accommodations never having been provided up to this time.

Cement walks to buildings A, B, C and D and the administration building of the new group have been provided in place of the old board walks and steps, which have heretofore been a constant source of trouble and expense.

A cement floor and other improvements have been placed in the basement of the building used as a morgue, and our morgue facilities thus so much improved that, although they are still rather crude, we shall be able to get along until other more pressing needs have been provided for.

A new road roller has been provided.

The Bacon Air Lift Company have completed their system for providing water for the hospital. This system has proved to be a complete success, and we now have sufficient perfectly pure water for all our needs.

A small corrugated iron building has been erected in which to store the supply of oil of different kinds, so that danger of fire from such source will be minimized.

A new hydrotherapeutic apparatus, consisting of a needle bath and douche, with suitable valves and a mixer, has been provided for the women's acute service.

A moderate amount of additional laundry equipment has been provided, so that at the present time our laundry facilities are such as to make the standard of work comparatively high, with the exception that we are unable to do the large amount of ironing which should be accomplished and which might be accomplished were we provided with electric flatirons.

Several food wagons have been provided for the better service of food in the men's dining halls.

A new blacksmith and wheelwright shop of corrugated iron has been constructed in the neighborhood of the old boiler house, and the old shop torn down and removed.

A moderate amount of furniture, principally for the acute services, has been provided.

Laboratory apparatus, consisting principally of a new microscope and instruments for examination of the blood, has been allowed and is in use.

A new auxiliary boiler plant has been erected. This construction was undertaken very late in the year 1900 and was pushed forward with all possible rapidity, so that the hospital might derive advantage from it during the winter of 1900-01. Owing to the conditions referred to above, when this construction was undertaken, the boiler house was not built for permanent occupancy. This building and the new plant installed therein have, however, well served their purpose. The new group is now being heated entirely from this plant to the very great relief of the old boiler house, and providing some new steam connections and a new hot water system be installed in connection with a permanent plant a very great saving in coal can be effected.

A small structure for a fire hose reel has been provided for at the new group.

During the past year an extensive contract for improving our water service piping and mains has been completed, which renders our water service at the present time quite satisfactory.

By means of the new water service pipes and the better connections which have been made we are now able to get a satisfactory pressure in all the old buildings of the hospital which depend on gravity pressure. An important element in securing this result was the extension of our 12-inch water main vertically to a height of about 30 feet at the main reservoir, thus doing away with the necessity of closing this main and pumping into the closed main in order to obtain sufficient pressure. The vertical portion of this main is now opened at the top, and is sufficiently high to give the necessary pressure in our service pipes, and sufficient water overflows from the vertical portion of the main to keep the water in the reservoir at a level of about 5 feet, which is found to be sufficient for our needs at night, so that for about 8 hours during the night we are able to stop our air compressor and pumps at the boiler house, giving time for needed repairs. The amount of leakage from the reservoir at or below the 5-foot level, cannot be very accurately determined, but it is not considered to be a very serious matter.

A railroad spur has been installed at the new auxiliary boiler house, and it is expected that a railroad trestle to complete the spur will be installed in the near future.

A large amount of steam piping has been covered, resulting in a considerable economy and stopping the forcing of our boilers to a great extent last winter.

The boundaries and subdivisions of the hospital property were surveyed during the past year, marked off by monuments, and a suitable map of this survey is now being prepared.

A new corrugated iron wagon shed has been erected in the neighborhood of the horse stable.

The old dynamo room has received a cement floor, and considerable additional cementing has been done in the neighborhood of the pumping station and the old boiler house.

The boiler house chimney has been retopped.

A steel ceiling has been placed in ward one, and in a portion of ward four, building A.

The cow barn and one of the women's cottages have been entirely repainted.

A new sink and range have been provided for the staff kitchen, thus relieving the work of preparation of food for patients and employees in A-B Kitchen.

A satisfactory bowling alley has been built in the basement of building D dining-room. This has been a source of much pleasure and entertainment to officers, employees and patients.

Quite extensive carpentering repairs have been made in both the men's and women's cottages.

The driveway to superintendent's house has been lighted.

A new electric transformer and pole line has been installed in the neighborhood of the men's cottages.

A portion of the boiler house roof covering our carpenter shop has been renewed and some other repairs made.

The contract for an extension to our bakery is well under way, and in the new extension two Duhrkop ovens are being installed.

Quite extensive repairs and extensions to our telephone system have been made.

A contract has been let for installing a new engine in the laundry, with some changes in the steam piping and hot water apparatus, which will facilitate the work of the laundry. The work on this contract has not been completed.

Additional accommodation for cows and a new silo at the dairy barn are in course of construction.

A contract has been let for a new cold-storage building to be erected on the site of the root cellar. Owing to the fact that suitable foundations for the heavy partition walls of this building were not secured, these walls have settled and cracked and it will be necessary to entirely remove them and go down to a solid foundation. The prevailing impression is that the site of this building was on made ground, and whereas the original foundation walls of the root cellar went down to a solid foundation, the partition walls of the new structure only went down to about 12 inches below the basement floor of the old building. It is contended that the character of the soil should have been observed and reported to the State Architect by the contractor

doing the work. This was not done until serious trouble occurred.

Material has been allowed for painting wards 3, 4, 5, 6 and 7, and that work is now well under way.

A contract has recently been let for the erection of a nurses' home to accommodate about 135 employees, but the work of construction is not yet begun.

Many improvements have also been made by our regular mechanical force. The more important among these improvements will be found tabulated in the steward's report.

METHODS OF TREATMENT

It may be interesting for me to outline the usual methods of procedure in the medical treatment of patients, having special reference to acute and curable cases.

All acute cases in poor physical condition, those showing great restlessness and most of those in a depressed state, are at once placed in bed on their arrival at the hospital. From this time on they are under constant observation until their condition has been thoroughly analyzed; or until they have sufficiently improved to call for different treatment or to be considered convalescent, or until their transfer to other wards as chronic and incurable has been determined upon. During this time their blood and secretions have been examined in our pathological laboratory and a definite line of medical treatment has been adopted. In most of these cases their mental symptoms are found to be greatly exaggerated, owing to a failure on the part of the organism to remove waste. In nearly every case it is found of great advantage to institute treatment at once toward this end, and the treatment can be kept up with good results for some time as a rule; the result is that auto-intoxication, especially from the intestinal canal, which is almost always present, is removed or reduced to a minimum; the physical condition immediately improves, and there is nearly always great improvement in the mental symptoms. The diet of these cases is carefully looked after from the start. An attempt is made to give

them all the nourishment that their organism can assimilate and make use of. In a few cases where food is obstinately refused nutrition is maintained by the use of the stomach tube passed by the nose. By this method it is possible, as is shown by our records, not only to maintain nutrition, but to obtain a rapid gain in weight with a corresponding gain in strength. Aside from diet, the use of water in considerable amounts taken between meals is insisted upon and is found to be of great advantage.

The protection sheet and seclusion are resorted to only in rare instances when necessary to protect the patient and others from the results of the patient's restlessness and violence. Such restraint is only needed for short periods, and used in this way when it is regarded necessary is found to be of great service to the few cases requiring it. Of course any complicating physical disorders receive attention and are treated in accordance with the ordinary principles of medicine. Hypnotics are used as little as possible and are seldom required, the measures taken to relieve the patient from auto-intoxication very largely doing away with the necessity for them, and hydrotherapeutic measures taking their place in most instances where they are ordinarily employed.

The extract of thyroid gland is employed in certain apathetic, stuporous cases in which a profound alterative seems to be indicated, and in these cases it is believed that an improvement (following its cessation) is brought about sooner than is usual under other treatment. It has also been given to some chronic cases, and in a few of these an improvement in habits has been noticed where they had been formerly apathetic, untidy, filthy and disinclined to employ or exert themselves.

On the whole the most important and valuable treatment generally applicable to acute recoverable cases is the application of the different forms of hydrotherapy in connection with massage in some cases. Hydrotherapy is given by specially qualified persons in the following forms: ablutions, drip sheet, cold wet pack, hot pack, needle bath, spinal douche, cold tub, hot tub,

warm bath, warm continuous bath, and the salt rub as an occasional adjunct. The forms most used are the cold wet pack, the hot pack, needle bath and spinal douche. The technique follows closely that prescribed by Dr. Simon Baruch. It is found that properly graduated from the milder measures a good reaction can almost always be obtained. Our experience has not shown the warm continuous bath for disturbed patients as valuable as claimed by many writers, for when relaxation is obtained by that method it is apparently the result of exhaustion in contradistinction to the tonic sedative action of the cold pack.

On admission patients are at once informed where they are; that their relatives have been notified; that they may write to them, and if they are agitated or apprehensive an attempt is made to soothe them. Later when an improvement has been brought about the falsity of their delusions is kindly pointed out, and efforts are made thereafter to strengthen such impression. Frequent efforts are made by physicians and nurses to stimulate such patients as require treatment of that character by conversation, by trying to interest them and endeavoring to cultivate a healthy mental and moral attitude.

The attitude of nurses and attendants towards patients is also carefully looked after, and they are made to understand by frequent and systematic lectures on the subject constantly given the necessity for treating patients with kindness, a proper consideration for their irresponsibility, and a realization that mental illness is the cause of their being at times troublesome and trying to the patience of others, and this attitude is insisted upon as well as the constant care and observation necessary to prevent accidents. As soon as consistent with their physical condition it is sought to interest new patients with some employment, with games, music, dancing and the special entertainments given in the amusement hall. Physical culture is given daily to patients who are likely to be benefited. These exercises are selected from many methods and are conducted daily for about fifteen minutes by a competent person. All patients physically able are regularly taken out for a walk every day when

the weather is suitable. In all forms of treatment individualization of the case and not routine is the principal end.

Tubercular cases are isolated in two cottages, one for men, the other for women, and an attempt made not only to prevent the infection of others, but to secure an arrest of the disease to this end. Patients are kept out of doors during the daytime, are given extra diet and suitable medication, according to the case.

AMUSEMENTS

In the main the amusements provided have been much the same as in the year immediately preceding—card and tea parties, picnics, bathing, boating, fishing, singing of hymns Sunday evenings, croquet, basket ball, which seems to be specially adapted for the convalescent women, who are much interested in playing with their attendants; ball games, band and orchestra concerts in the amusement hall, other portions of the hospital and on the lawns; music during meal hours on some of the holidays, the weekly dance during the cool weather, stereopticon views, vocal and instrumental music, readings, recitations and chorus singing on some of the wards for the benefit of those unable to go to the amusement hall, and a sewing school for women, followed by dancing and refreshments.

The pianos, pool and billiard tables, bowling alley, gymnasium and circulating library have been constantly used and thoroughly enjoyed by both patients and attendants.

The Fourth of July and Field Day were celebrated in an appropriate manner with parades, ball games, fireworks, sports, etc., prizes being awarded to the winners.

The following special entertainments have been given in the amusement hall, our employees and patients filling the casts in all excepting the first two:

“Miss Jerry.”

Readings by Miss Myra C. Holmes.

“My Turn Next,” farce.

“The Arabian Nights,” three act comedy.

“Little Toddlekins,” farce.

“To Oblige Benson,” farce.

"What Happened to Jones," comedy.

Six variety entertainments consisting of vocal and instrumental selections, recitations, readings and comedy sketches.

Our patients have also been entertained by the Actors' Club, from the Actors' Colony, St. James, L. I.; by members of the Methodist and Roman Catholic churches of Kings Park, and also by members of the local organization of the W. O. W.

As mentioned in another part of this report we are laboring under a great disadvantage in trying to entertain our patients in our present amusement hall, it being entirely too small and not properly equipped for the purpose.

SUGGESTIONS AND FURTHER NEEDS

Under this heading I desire to call to the attention of the Board the condition of the wooden cottages and to question the propriety of making the somewhat large expenditure which will be necessary in the near future if they continue to be occupied.

These cottages were erected in the year 1888; they were thrown up very hastily, cheap material as a rule being used in their construction. No basements were provided, and when the steam conduit was installed no partitions were put in to shut off the vapor from passing from the conduit underneath these wooden structures. The result was the cottages were soaked with vapor, and the timber throughout has rotted very extensively. Extensive repairs have been made to these cottages for years, but more extensive repairs require to be continually made, and the time has now come when I feel it questionable whether it is economy on the part of the hospital to continue some of them in use. I would recommend that the State Architect be asked to make a careful examination of these structures and report as to the proper course to pursue.

PERMANENT AUXILIARY BOILER HOUSE

When the auxiliary boiler house was constructed last winter it was thoroughly understood that it was to be a temporary structure and was so planned by the State Architect, and with

that understanding the plans were approved by the board of managers. This temporary boiler house was very hastily and cheaply constructed in order to meet an emergency, and being of a highly inflammable character the danger from fire is considerable. A permanent boiler house should be erected on the other side of the railroad trestle so that more room may be given for the development which is sure to follow at this point in the future. In connection with the permanent boiler house a hot-water system for heating water at this boiler house and supplying it direct to all the patients' buildings should also be installed. It is estimated that such a hot-water system, together with steam connections which would enable the three large kitchens to be supplied with steam during the summer months from this new boiler house, would make a saving to the hospital of at least \$5,000 a year, and I therefore feel that it calls for the earnest attention of the board of managers, the State Commission and the State Architect. So long as we are obliged to supply steam from the old boiler house during the summer months for heating water and cooking purposes our per capita expenditure for fuel will be very high and will result in a comparatively high total per capita expenditure.

The cost of a permanent boiler house, including installation of four old boilers and two new ones with mechanical stokers, may be approximately estimated at \$25,000. The cost of installing a hot-water system, as above recommended, with suitable high pressure steam connections for heating the kitchens from the new boiler house, may be safely estimated at not more than \$12,000. This installation would, as above stated, save from \$5,000 to \$6,000 per year, and would therefore pay for itself in about two years.

If the installations above recommended are made, viz: hot-water system and high pressure steam connections, so that the kitchens can be supplied with steam from the new boiler house, the two steam mains running from the old boiler plant will be available for low pressure steam. This will make it possible to utilize our exhaust steam from pumps and engines at the

old boiler house in heating our buildings in the winter time. A vacuum pump now on hand could be attached to the return main, making it possible to use the exhaust steam in the supply mains, and obtain a circulation at two pounds gauge pressure as against 10.7 pounds gauge pressure. The exhaust steam could be supplemented when necessary in very cold weather by live steam at the same pressure. The saving to be effected by thus using exhaust steam supplemented by live steam at low pressure is estimated at \$7,300 per year, or 2,000 tons of pea coal at \$3.65 per ton. The only expenditure necessary would be for new connections at the old boiler house, and would not amount to over \$1,000, and I recommend that this expenditure be made.

AMUSEMENT HALL

It must be evident that the present amusement hall, which is an old structure formerly used as a dining-room, is not only entirely inadequate for the purpose of an amusement hall for our large population, but is not structurally adapted to this purpose. We now have a population of some 3,300 people; our amusement hall will at the utmost only accommodate 350 people. We should be provided with an amusement hall which would accommodate 1,200 people, and in addition a suitable room for a gymnasium would be exceedingly desirable. Estimated cost, \$25,000.

Screens for windows on the lower floor of buildings comprising group one.—The upper windows of this group were provided with wire screens at the time the buildings were occupied. Since that time it has been found that the ventilation during the summer months on the lower floor was very unsatisfactory owing to the fact that it is impossible to have either the upper or lower sash of the windows opened for more than five inches on account of the danger of patients escaping. I do not suggest that screens be placed on all the windows of the lower floor, only on a comparatively small number, and if after these are placed it is found desirable to increase the ventilation the

matter can receive further attention. It is suggested that the sum of \$500 be expended for this purpose.

Electric flatirons.—With regard to this item I would say that our present facilities for heating flatirons in the laundry consists of a large stove which, during the summer months, heats up the ironing room of the laundry to 100 degrees and over. The same conditions obtain to a certain extent in the tailor shop. Further than this it is impossible by the use of flatirons heated on the stove to satisfactorily iron a large number of our women patients' dresses and other garments so that they may present a satisfactory appearance. The use of electric flatirons, which would greatly facilitate the work of our employees and patients working in the laundry, would enable us to materially raise the standard. It is proposed to install a small engine and generator for furnishing electric power during the daytime for other purposes, and such being the case the use of electric flatirons would be economical. This estimate includes an electric transformer, all the necessary wiring and the necessary flatirons in the laundry and tailor shop. Approximate estimate, \$800.

Outside painting of the wooden cottages.—This matter has received so much attention from the board of managers and the State Commission in Lunacy that it is hardly necessary for me to enlarge on it. It is proposed to do a portion of this work during the present autumn; that is to say, it is proposed to scrape the portions of the cottages where the paint has peeled and put on one coat, leaving the remainder of the work to be done next spring when we expect to give a complete coat of paint to all the cottages. Of course if as a result of an inspection by the State Architect any of these cottages should be condemned, it would not be good policy to make an expenditure for painting such cottages.

Brick vault or large safe for preserving patients' property and records of the hospital in steward's office.—This is necessary to replace a wooden cupboard which is not suitable for this purpose. Estimated cost, \$225.

New retaining wall with buttresses below building A.—The

present wall is eight inches out of plumb and cracked. It should be taken down and rebuilt with at least five buttresses. Estimated cost, \$350.

Cement floor in basement corridor building A.—This corridor is 10 feet wide and 225 feet long, and is a passageway used for communication between the general offices in A center and the linen room in the rear of the building; the staff dining-room, A-B kitchen, including the employees' quarters in that building. Should the drug room be moved to the rear of building A, as I hereafter recommend, the cementing of this basement corridor will be all the more necessary. None of the basements of the four old brick buildings were ever cemented; the floor consists simply of earth which is sometimes damp but most generally dry and easily rises in dust, and as there is considerable traffic through this basement the necessity of a cement floor is obvious. Estimated cost, \$250.

Removing present drug room to basement now used as linen room in rear of building A and installation of suitable fixtures.—The present drug room in the basement underneath the general offices is very small, dark and inadequate. It cannot be properly ventilated and should be moved as soon as possible. We propose to place it in what seems to be, on the whole, the most suitable and available location—that of the present linen room. Estimated cost, \$150.

Remove linen room to basement of building B.—The space occupied by the linen room at present is inadequate; moreover, we need this space for the drug room. It is therefore proposed to remove this linen room to the basement of building B where adequate space can be secured, the only objection being the fact that it will be located then as now—in the basement. However, we have no other suitable available space. Estimated cost, \$30.

Corrugated iron plumbing and paint shop.—A building is needed in the neighborhood of the men's cottages as a plumbing shop for the many small plumbing repairs which are necessary, and which it is undesirable and uneconomical to take to the

large machine shop at the boiler house; and it is undesirable that these repairs should be done as at present in one of the basements of the patients' buildings inasmuch as fire is sometimes necessary. In connection with the building for this purpose it is proposed to provide space for a paint shop. Our present paint shop is located in a building most of which is occupied as a tailor shop. More space is needed for our tailor shop, hence the propriety of this change. Estimated cost of the building desired, \$800.

Piazza in front of A-B kitchen building to extend across the south end of this building.—This piazza is recommended for the comfort of the employees rooming in this building. During the summer months they have no suitable place such as is ordinarily provided, where they can sit out of doors when off duty.

Steel ceiling in buildings A, B, C and D.—The plaster ceilings of many of the wards in these buildings have cracked very badly and are continually falling. This is particularly the case in the general offices in A center. Extensive repairs have constantly to be made, and aside from this fact the falling of large areas of plaster is a source of considerable danger. Estimated cost, \$1,100.

Crushed stone; 400 cubic yards.—This stone will be needed next year in order to keep our boulevard in repair. Estimated cost, \$650.

New furniture for wards for employees' rooms and for our new employees' home, which it is expected will be completed next spring. Estimated cost, \$5,000.

A comparison of the furniture in the hospital at Kings Park with other State hospitals is very much to our disadvantage. No adequate provision of furniture has ever been made, and I desire to specially call the attention of the board of managers to this fact.

New plumbing and sewerage for buildings A, B, C and D.—This work was reported on by the State Architect's sanitary engineer July 24, 1901. The plumbing and sewerage of these

buildings are such that they should receive early attention. Estimated cost, \$5,000.

Additional cold storage facilities in our three large kitchens.—When these kitchens were constructed the rooms designed for cold storage were not provided with any furring and air space in the walls which was necessary in order to make them suitable for cold storage. The result is a very wasteful use of ice. Moreover, the amount of ice which has to be daily installed in these kitchens during the hot months of the year is a source of great annoyance and requires a large amount of labor. It is proposed to put in suitable furring and sheathing so as to provide sufficient air spaces for properly insulating these cold storage rooms, and in addition to install a small chemical refrigerating apparatus at the new group kitchen. This kitchen is situated at such a distance from the general cold-storage plant to be erected that the propriety of such an installation is easily seen. This installation can easily be made and will be economical to operate in view of the fact that we have a sufficient amount of power in the immediate neighborhood of the cold-storage room at all times, there being 40 pounds of steam and a small Westinghouse engine in the basement. Estimated cost of changes in the three kitchens, including the cost of one small refrigerating plant in the group kitchen, \$2,000.

Renewals and repairs to maple floors in buildings A, B, C and D and the present amusement hall.—Owing to the fact that these floors were improperly laid they warp very badly, particularly in the summer time when there is no artificial heat in the buildings. It is proposed where necessary in the wards to take up the floors and properly nail the under floor, which was never done; relay such of the maple flooring as is suitable for further use and provide sufficient new flooring to make the job complete. Estimated cost, including labor, \$2,300.

Repairs to the new group, including woodwork in the administration building to replace that ruined by steam leakage from the conduit. Estimated cost, \$50.

Screens for two piazzas at the new group and 42 fan lights and five windows on the different stairways going to the second floor of cottages at the new group.—These windows were not screened at the time screens were provided for the second floor of the group some years ago. Screens are necessary on the fan lights, as during the summer months it is now necessary to keep these fan lights closed to prevent escape of patients, thus suitable ventilation is prevented. Estimated cost, \$800.

Trees and shrubs for lawns.—The amount of grading which has been done and the new lawns which have been made make it necessary to set out some trees and shrubs. Estimated cost, \$150.

Catch-basins to protect roads and gutters and drain pipes for same.—As we do additional grading and make new roads these catch-basins become absolutely necessary in order to protect the work accomplished. Estimated cost, \$400.

Eight storm doors at rear entrances of buildings A, B, C and D.—These storm doors are necessary in order to prevent the rain beating in on the floors of the patients' wards as is now the case in heavy storms. Estimated cost, \$260.

Cement flooring for coal trestle at the new auxiliary boiler house.—The necessity for cement flooring to keep the coal which is dumped at this trestle out of the dirt is obvious; 2,875 square feet. Estimated cost, \$250.

Enlarging carpenter shop and putting in new machinery.—At present there are only two machines operated by power in the carpenter shop—one buzz saw and a mortising machine. The amount of repairs constantly and of necessity required at this hospital make additional space and machinery very desirable. Estimated cost, \$1,000.

Small engine and dynamo for light loads.—Up to the present time we have never run our dynamo plant during the daytime. We have, however, frequently seen the desirability of running a small dynamo in order to light dark basements and other portions of the buildings which require artificial light in the day-

time. Most of our workshops are situated in basements, and we are frequently obliged to suspend work in them owing to lack of sufficient light. This difficulty is also experienced in our tailor shop and laundry. Artificial light is needed in the new ovens installed in our bakery. In addition to this it is extremely desirable that we have electric power available for running electric flatirons. A suitable installation of electric flatirons would enable our employees and patients to keep patients' clothing in proper condition. As it is now, most of our women patients' dresses, for instance, are unironed and present an untidy appearance. A second-hand engine of suitable character can be obtained from the Hudson River State Hospital for about \$350. It is estimated that if a new generator be obtained the entire cost of the installation would amount to less than \$2,000. If a second-hand generator be obtained, and it is believed a suitable one can be found, the installation can be made for considerably less. Estimated cost, however, I will put at \$2,000.

Additional fire protection for the 15 wooden cottages occupied by patients, men's dining-room, employees club and cottages G, I and H.—Each cottage is now supplied with not over two fire extinguishers, and it is considered necessary to have an additional number. Estimated cost, \$400.

New roof for boiler house.—On the occasion of an official visit by Commissioner Parkhurst last summer the condition of this roof was called to his attention and a new roof for a portion of the boiler house used as a carpenter shop was allowed; also some repairs. An examination of the remainder of the roof shows that a complete renewal is necessary. Estimated cost, \$1,500.

Painting of B center, first and second floors, and ward 8.—These have never been painted.

Painting of the ceiling in the group dining-hall and scullery and outside work at the new group. Total for painting, \$2,526.14.

Repairs to electric light pole lines going to the women's cot-

tages.—This includes new wires and new transformer. We have the poles on hand. The conditions are similar to those which were found in connection with the electric light line to the men's cottages and which were remedied during the past summer. Estimated cost, \$425.

VISITORS

The hospital has been visited by Governor Odell and party, the State Commission in Lunacy and the board of managers; also by members of the grand jury of Kings county and Professor W. O. Atwater, professor of chemistry at Wesleyan University and expert in dietetics for the United States Agricultural Experiment stations and for the New York State hospitals.

ACKNOWLEDGMENTS

The Brooklyn Citizen has been regularly received for a number of years and is much appreciated.

RESIDENT OFFICERS

The following changes among the resident officers have occurred during the past year:

Dr. Walter H. Kiddar was appointed second assistant physician in October, 1900, and resigned in June, 1901.

Dr. A. J. Bising was appointed junior physician in December, 1900, and resigned in February, 1901.

Dr. E. A. Nevin, of the St. Lawrence State Hospital, was appointed junior physician in April, 1901.

Dr. Paul G. Taddiken was promoted to second assistant physician in July, 1901.

Dr. Menas S. Gregory, medical interne, was promoted to junior physician in July, 1901.

Dr. B. G. Williams, junior physician, was promoted to assistant physician in July, 1901.

Mr. W. A. Thomas, resident steward, was transferred to the position of steward at the Matteawan State Hospital in July, 1901.

Mr. Charles S. Pitcher, resident steward of the Manhattan State Hospital, East, was transferred to this hospital as resident steward in July, 1901.

In conclusion I take the opportunity to express my appreciation to the board of managers, the State Commission in Lunacy and to the officers and employees of the hospital for the aid they have extended to me in administering the affairs of the hospital during the past year.

Respectfully submitted.

O. M. DEWING

Superintendent

SEWING ROOM REPORT YEAR ENDING SEPTEMBER 30, 1901

Cashmere dresses	23
Cashmere shirt waists.....	11
Cashmere dress skirts.....	1
Patients' dress, private material.....	1
Job cheviot dresses.....	137
Seersucker dresses	284
Primrose cheviot dresses.....	863
Everett classics dresses.....	32
Percale dresses	794
Heavy gingham dresses.....	123
Job cheviot shirt waist.....	1
Howsilki dresses	13
Primrose cheviot shirt waists	4
Primrose cheviot dress skirts.....	3
Percale shirt waists.....	15
Percale dress skirts.....	1
Job cheviot dress skirts.....	2
Heavy gingham dress skirts.....	1
Anderson, L. L., night gowns.....	295
Naumskeag night gowns.....	763
Atlantic "A" night gowns.....	349
Unbleached muslin night gowns.....	12
Anderson L. L. night shirts.....	57
Naumskeag night shirts.....	271
Atlantic "A" night shirts	800
Outing flannel night shirts.....	47
Unbleached muslin night shirts.....	25
Naumskeag chemises.....	330
Anderson, L. L., chemises.....	92
Pacific sheeting chemises.....	427
Atlantic "A" chemises.....	400
Atlantic "A" drawers, pairs.....	312
Pacific sheeting drawers, pairs.....	1
Z muslin aprons.....	724
Hills' muslin aprons.....	615

Lonsdale aprons.....	1,641
Rubber aprons.....	40
Gingham aprons.....	369
Naumskeag cooks' aprons.....	97
Atlantic "A" cooks' aprons.....	207
Lonsdale surgical aprons.....	12
Z muslin waitresses' aprons.....	30
Naumskeag waitresses' aprons.....	78
Naumskeag waiters' aprons.....	137
Atlantic "A" butchers' aprons.....	24
Columbian cheviot skirts.....	985
Amoskeag serge shirts.....	126
Percale shirts.....	371
Glendale flannel shirts.....	432
Lonsdale bosom shirts.....	116
Z bosom shirts.....	69
Outing flannel bathing suits.....	24
Outing flannel bath robes.....	57
Outing flannel dressing sacques.....	101
Outing flannel wrappers.....	79
Canton flannel skirts.....	295
Percale neckties.....	311
Melton capes.....	38
Golf material capes.....	68
Kersey capes.....	12
Shawl capes.....	128
Anderson, L. L., pillow slips.....	1,012
Atlantic "A" pillow slips.....	1,093
Cover for collar and cuff machine.....	1
Atlantic "P" pillow slips.....	609
Androscoggin sheets.....	397
Boston brown sheets.....	2,603
Boston brown protection sheets.....	16
Boston brown pillow cases.....	84
Laundry bag.....	1
Muslin bandages.....	7,064

Bleached muslin sheets.....	54
Bleached muslin pillow slips.....	44
Butcher linen bureau covers.....	24
Butcher linen table covers.....	4
Butcher linen stand covers.....	4
Butcher linen doilies.....	8
Butcher linen tidies.....	3
Cheese cloth strainers.....	18
Cheese cloth bath curtains.....	1
Cheese cloth cuff and collar sponge.....	1
Cheese cloth bandages.....	65
Cheese cloth tea bags.....	25
Cheese cloth coffee bags.....	47
Official State flag.....	1
Mohawk Valley pillow slips.....	24
Utica U sheets.....	13
Cretonne Vassar bed covers.....	6
Cretonne sofa cushions.....	61
Cretonne clothes curtains.....	52
Cretonne head rests.....	41
Cretonne lambrequins.....	18
Cretonne trunk cover.....	1
Job cheviot protection sheets.....	19
Swiss sash curtains, pairs.....	29
Swiss curtains, pairs.....	68
Damask table covers.....	54
Drill protection sheets.....	9
Duck sofa cushions.....	14
Fruit of loom screen curtains, pairs.....	2
Fruit of loom sash curtains, pairs.....	38
Fruit of loom curtains.....	241
Heavy gingham protection sheets.....	8
Lawn neckties.....	51
Mosquito netting bed covers.....	101
Mosquito netting window screens.....	1
Plush portieres.....	6

Z muslin curtains, pairs.....	59
Plantation cotton handkerchiefs.....	142
Plantation cotton shrouds (men's).....	4
Plantation cotton shrouds (women's).....	4
Plantation cotton burial chemises (women's).....	4
Plantation cotton burial drawers (women's), pairs...	4
Rubber sheets	1,084
Rubber caps	23
Rubber surgical aprons.....	4
Muslin shrouds (men's).....	94
Muslin shrouds (women's).....	88
Muslin burial drawers (women's), pairs.....	111
Muslin burial chemises (women's).....	106
Silkaline sofa cushions.....	20
Silkaline lambrequins	21
Silkaline piano covers.....	3
Seersucker laprobes	2
Damask tablecloths, bleached	53
Damask tablecloths, unbleached.....	507
Adirondack bedticks	702
Adirondack pillowticks	267
Toil du Nord sofa cushions.....	5
Dish towels	4,878
Roller towels	496
Bath towels	3,783
Hand towels	2,658
Tick aprons (old material).....	188
Tick suspenders, pairs (old material).....	636
Tick iron holders (old material).....	224
Tick knee pads (old material).....	170
Muslin pillowslips, unbleached	76

INDUSTRIALS

Rag mats	12
Tidies (embroidered)	20
Table covers (embroidered).....	11

Center piece (embroidered).....	1
Athletic flags (embroidered).....	2
Head rests (embroidered).....	67
Traycloths (embroidered)	4
Sofa cushions (embroidered)	52
Laundry bags	4
Ruffles.....	12
Cords and tassels, pairs.....	400
Bandages.....	6,542
Portieres, pairs	6
Clothes curtains, pairs	5
Bureau covers (embroidered)	8
Doilies (embroidered)	31
Lawn ties (embroidered)	30
Hats, trimmed	6
Piano cover (embroidered).....	1
Sash curtains, pairs.....	2
Curtains.....	3
Stand covers (embroidered).....	2
Handkerchiefs.....	142
Napkins.....	33
Fascinator.....	1

Tatting

Center pieces	15
Doily.....	1

Crocheting

Lace, pieces	518
Mittens, pairs	21
Slippers, pairs	6
Tidies.....	23
Fascinators.....	25
Shawl.....	1
Center piece	1

Drawn Work

Bureau covers	22
Center pieces	6
Sofa cushion	1
Doilies.....	7
Table covers	4

Embroidery

Sofa pillows	8
Curtains, pairs	23
Center pieces	3
Renaissance.....	1

Knitting

Mittens, pairs	8
Caps.....	54
Fascinators.....	33

Hemstitching

Bureau covers	6
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Nurses' Uniforms Made

Caps.....	1,419
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Mending

Aprons.....	9,002
Blankets.....	2,124
Bedspreads.....	180
Bathrobes.....	7
Chemises.....	7,538
Cooks' aprons	688
Cooks' jackets	686
Cooks' trousers	346
Cloaks.....	148
Coats.....	847
Camisoles.....	131
Curtains, pairs	86

Cape.	1
Dresses.	27,640
Drawers.	9,183
Drawers (men's)	6,903
Hoods.	878
Hats.	553
Nightgowns.	12,850
Nightshirts.	1,568
Overshirts.	4,342
Overcoats.	215
Pillowslips.	1,750
Trousers.	661
Sheets.	6,989
Socks.	11,530
Stockings.	14,350
Skirts.	13,502
Shawls.	58
Tablecloths.	1,092
Undervests.	6,330
Undershirts.	6,785
Vests.	412
Waists.	1,373

CARPENTER'S REPORT FOR YEAR ENDING SEPTEMBER 30, 1901

- Enclosure of elevator at group kitchen.
- Estimate blank cabinet, steward's office.
- Built tinshop out of old material.
- Oak fixtures for barber shop.
- Four new washing machine cylinders.
- Slat floor in staff laundry.
- Fitted up octagon building, formerly used as a morgue, into a sleeping room.
- Bookcase for superintendent.
- One hundred and fifty hospital tables.

Twenty-five sash and panel doors.
One meat tub for butcher shop.
Twenty-four towel racks in New group.
Circular seat in ward 7.
Cabinet and reel for stereopticon.
New stoop in court yard of ward 9.
Cabinet stand in staff office.
Three dozen checker boards.
Large butcher table.
Ice run.
Cupboard for bread in group.
Cupboard for linen in group.
Kitchen table for "C-D" kitchen.
Two flush tanks for plumber.
Twenty-one bath racks for cottages and buildings.
Two index stands, staff office.
Panel work under stairs, "C-D" kitchen.
Rear stoop for cottage "H."
Stairway to cottage 22.
Six milking stools for dairy barn.
Blackboard for dairy barn.
New steps leading to cottage 25.
Three ironing boards for laundry.
Twenty-two hotbed frames for farm.
Five trap doors in dairy barn.
Large cupboard for "A-B" kitchen.
Bookcase for library in club house.
Two finishing shirt ironing tables.
Rubbish box for club house.
Rubbish box for dining hall.
Enclosure of piazza at cottage 43, for storing fire truck and
hose cart.
New corrugated blacksmith and wheelwright shop.
Nine food trucks for dining halls.
Four laundry tubs.
New steps leading to cottages 20, 22 and 23.

About 3,500 feet of new flooring.

Fifty-seven clothing shelves and racks combined in rooms where there are no wardrobes.

Second story to piazza of cottage "G."

Alterations to offices in "A" center.

Made the number of coffins required by the hospital.

Twenty-five feeding troughs for piggery.

A large number of miscellaneous jobs too numerous to mention.

REPORT OF TIN SHOP FOR YEAR ENDING SEPTEMBER 30, 1901

New Work

22 cereal boxes.

18 dozen brown bread molds.

3 coffee pots.

One-half dozen coffee perculators.

3 dozen 5-gallon tin pails.

4 dozen 5-gallon galvanized pails.

1 dozen cruller cutters.

1 dozen 6-quart milk cans.

1 dozen 3-gallon milk cans.

1 dozen galvanized smoke jackets.

1 dozen 6-quart tin dippers.

1 dozen galvanized sink linings.

2 dozen dish pans.

1 60-gallon naphtha tank.

2 brass soap pumps.

1 Worthington pump covered.

1 dozen 10-inch funnels.

One-half dozen garbage cans.

3 dozen bread pans.

One-half dozen oil cans.

2 dozen food boxes.

1 dozen dinner boxes.

1 dozen gallon measures.

One-half dozen large dish trays.

One-half dozen large bread boxes.
 75 feet of 7-inch vapor pipe.
 1,500 square feet of tin roof.
 2,000 feet of galvanized leader.
 200 feet of galvanized ridges.
 100 square feet tin ceiling.
 200 feet of hanging gutter.
 24 food bins lined with galvanized sheet iron.
 Also a large number of miscellaneous jobs too numerous to mention.

REPORT OF BLACKSMITH SHOP FOR YEAR ENDING SEPTEMBER 30, 1901

New Work

New horseshoes	1,220
New tire bolts	799
New carriage bolts	914
New fire irons	23
New tires	16
New seat springs	4
New cutting chisels	12
New king bolts	9
New jack clips.....	14
New antirattlers	8
New T and D plates.....	4
New axles	17
New lock plates	7
Bowling alley irons	16

REPORT OF WHEELWRIGHT DEPARTMENT FOR YEAR ENDING SEPTEMBER 30, 1901

New Work

New wagon bodies	8
New spokes	68
New push carts	2
New wagon bottoms	4
New wagon poles	5

New whiffletrees	58
New shaft bars	16
New wagon curtains	6
New wagon, garbage	1
New whip sockets	10
New wagon rims	10
New end boards	7
New plow beams	3
New wheels	16
New wagon beds	3
New wagon shafts	9
New head blocks	5
New wagon reaches	3
New wagon bolsters	3

REPORT OF TAILOR SHOP FOR YEAR ENDING SEPTEMBER 30, 1901

Coats, kersey	1,033
Trousers, kersey	1,826
Vests, kersey	268
Overcoats, kersey	56
Coats, duck	424
Trousers, duck	253
Overalls, blue denim.....	186
Combination suits, brown and white canvas.....	15
Strong sheets, canvas	3
Camisoles, brown and white canvas.....	45
Pieces repaired	8,758

REPORT OF SHOE SHOP FOR YEAR ENDING SEPTEMBER 30, 1901

Men's Creedmoor shoes, pairs.....	2,070
Men's kid shoes, pairs.....	128
Women's kid shoes, pairs.....	1,720
Canvas shoes, pairs.....	56

Canvas slippers, pairs	885
Canvas gaiters, pairs	454
Men's shoes repaired, pairs	1,091
Women's shoes repaired, pairs	500
Men's private shoes repaired, pairs	198
Women's private shoes repaired, pairs	46
Harness repaired and pieces made:	
New straps	316
New tugs	28
New breeching straps	7
New traces	14
New backing straps	12
New ankle boots, pairs	7
New pole straps	4
New lines	6
New halters	5
New brow bands	31
New throat latches	10
New cruppers	6
New top straps	26
New lazy straps	6
New check lines	5
New bellybands	7
Lines repaired	205
Pads repaired	73
Traces repaired	234
Tugs repaired	83
Collars repaired	146
Check lines repaired	47
Breeching straps repaired	22
Breechings repaired	95
Straps repaired	42
Blinds repaired	105
Bellybands repaired	33
Backing straps repaired	58
Top straps repaired	23

Dash boards repaired	5
Halters repaired	72
Brow bands repaired	17
Punching bags repaired	2
Air beds repaired	2
Whips repaired	10

REPORT OF MATTRESS SHOP FOR YEAR ENDING
SEPTEMBER 30, 1901

Hair mattresses	1,195
Hair pillows	520
Hair cushions	86
Knee pads	96
Feather pillows	32
Feather cushions	14
House brooms	2,460
Whisk brooms	220
Hair brooms	250
Dust brushes	405
Window brushes	209
Shoe brushes	160
Horse brushes	10
Scrub brushes	1,280
Bath brushes	98
Door mats	145
Cuspidor mats	75
Window shades	684
Window shades repaired	460
Floor polishers	125
Chairs caned	58
Wagons upholstered	3
Radiator brushes	125
Awnings	7
Carpets laid	45
Rugs bound	23
Trunk covers	4

Buffers	2
Mats	4
Butter machines repaired	25
Circular seat	1
Settees upholstered	11
Chairs upholstered	16
Lounges upholstered	8

REPORT OF MASON'S DEPARTMENT FOR YEAR ENDING SEPTEMBER 30, 1901

About 3,000 feet of plastering.

One brick furnace and chimney at piggery.

Four large manholes at new boiler house.

Two hundred feet of pipe connecting said manholes with sewer.

Also a large number of small jobs too numerous to mention.

ENGINEER'S REPORT FOR YEAR ENDING SEPTEMBER 30, 1901

Electrical Department

New transformer poles and wires for male cottages have been installed.

Street lights for driveway to Becar House.

Generating set was made and installed for fire-alarm system, replacing 165 batteries.

The following wiring has been completed:

Extension to dairy barn, shoe shop, mat shop, shoe rooms, outside lights at new group, pump house, dynamo room and bowling alley.

One hundred drop cords have been furnished, and fifty 1-light fixtures replaced by drop cords.

Telephone installed in cottage 20.

Plumbing Department

Automatic water devices installed in extension to dairy barn.
 Reset seven hydrants, set two new hydrants; all hydrants are now uniform.

New therapeutic bath installed in ward 6.

New toilet rooms fitted up in "A" and "B" centers.

New closets installed in "B," "C" and "D" centers, also in cottages 17, 25, 28 and 30.

New sewer and catch-basins installed in old dynamo room.

Overhauled all plumbing in cottage "I."

Steamfitting Department

Steam heat and hot water heater have been installed at dairy barn.

Several steam traps that formerly discharged to sewer have been changed to return line.

New 6-inch high pressure steam line with connections has been installed throughout machine shop and pumping station.

New 15-inch back pressure valve has been installed in exhaust line with necessary connections to use the Berryman heater.

Berryman heater connected to boiler feed line.

Four small return pumps have been removed from Group 1.

Drip connections for all steam kettles in kitchens have been installed.

FARM PRODUCTS, YEAR ENDING SEPTEMBER 30, 1901

Apples, 34,519 pounds.....	\$214 71
Asparagus, 192 pounds.....	9 80
Beef, carcass, 44,197 pounds.....	3,281 09
Beef trimmings, 4,684 pounds.....	319 06
Beets, 10,742 pounds.....	60 16
Beans, string, 34,716 pounds.....	356 96
Beans, lima, 2,160 pounds.....	22 45
Berries, 1,313 quarts.....	131 30
Cabbage, 143,675 pounds.....	768 24
Celery, 52 pounds.....	3 12

Carrots, 33,266 pounds	\$222 88
Chicken, 932 pounds.....	111 95
Cherries, 18 pounds.....	1 44
Corn, green, 43,845 pounds.....	224 26
Currants, 72 quarts.....	5 76
Cucumbers, 2,038	24 68
Eggs, 1,045½ dozen.....	152 08
Grapes, 215 pounds.....	4 30
Lettuce, 11,765 pounds.....	380 53
Milk, 263,415 quarts.....	8,560 99
Muskmellons, 4,550	227 50
Onions, 6,106½ pounds.....	182 54
Potatoes, 23,317 pounds.....	291 46
Peppers, 357 pounds.....	10 47
Pumpkins, 60 pounds.....	30
Péaches, 4,081 pounds.....	122 43
Pork, fresh, 36,745 pounds.....	2,314 94
Peas, green, 5,418 pounds.....	54 18
Parsley, 111 pounds.....	9 50
Parsnips, 13,425 pounds.....	120 83
Quinces, 365 pounds.....	9 06
Plums, 111 pounds.....	1 11
Rhubarb, 7,200¾ pounds.....	216 02
Radishes, 10,752¼ pounds.....	133 02
Spinach, 1,370 pounds.....	27 40
Squash, 21,175 pounds.....	51 75
Tomatoes, 42,441 pounds.....	339 53
Turnips, 67,208 pounds.....	416 69
Veal, 284 pounds.....	22 72
Watermelons, 3,434	686 80

\$20,094 01

Fodder, etc., consumed by cattle at dairy barn, credit for which is contained in item of 263,415 quarts milk

Ensilage, 470.14 tons.....	\$1,410 42
Cabbage, 22,195 pounds.....	66 29
Beets, 14,130 pounds.....	70 65
Corn, on ear, 450 bushels.....	135 00
Turnips, with tops, 7,370 pounds.....	10 06
Rye straw, 32,605 pounds.....	163 03
	<hr/>
	\$1,855 45
	<hr/>

FARM STOCK ON HAND

Farm feed—75 tons hay.

Wagons, sleighs and harness—4 trucks, 3 low down trucks, 1 hand truck, 1 dairy wagon, 1 water tank, mounted; 1 cart, 1 one-horse sled, 1 two-horse sled, 13 sets harness.

Farm and garden implements—1 milk tester, 1 bone mill, 1 swivel carrier, 3 one-horse cultivators, 4 two-horse cultivators, 1 hayrake, 1 disc marker, 2 corn harvesters (Osborne), 2 cradles, 2 grain drills, 2 potato planters, 3 spring tooth harrows, 1 Acme harrow, 1 disc harrow, 1 Osborne mower, 1 Adriance reaper, 2 premium plows, 1 Oliver plow, 5 plows, 1 ice plow, 1 field roller, 18 manure forks, 14 pitchforks, 1 Ross cutter, 1 Banner cutter, 1 hand corncutter, 1 fanning mill, 1 Greenfield engine, 1 two-horse Paris green sprinkler, 8 hand Paris green sprinklers, 1 $\frac{5}{8}$ dozen milk cans, 40 quart; 13 milk pails, 4 milk strainers, 6 milk stools, 1 milk scale, 1 platform scale, 10 water pails, 15 brooms, 1 ladder, 27 garden hoes, 9 pickaxes, 19 sand shovels, 5 scythes, 12 mattocks, 6 scoop shovels, 6 plow landsides, 12 plow points, 6 jointer points, 2 cross-cut saws, 4 hand saws, 4 lanterns, 12 wheelbarrows, 3 axes, 1 rope, 3 pulleys, 2 seed planters, 3 water cans, 3 water pails, 2 spades, 1 hammer, 1 cultivator, 5 dippers, 1 trowel, 1 pair hedge shears, 150 feet hose.

Farm supplies—75 pounds ribbon wire, 500 pounds ground bone dust, 150 pounds baling wire, 50 pounds Paris green, 50

pounds resin, 5 bushels seed corn, $1\frac{1}{2}$ bushels broom corn, 1,500 pounds ashes, 1 ton land plaster, 2 rolls wire, 300 feet black walnut, 1 stove.

Live stock—30 horses, 112 cows, 1 bull, 250 fowls, 4 brood sows.

REPORT OF WORK DONE AT LAUNDRY, YEAR ENDING
SEPTEMBER 30, 1901

Number of pieces laundered.....	2,956,668
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STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900.....	1,198	1,528	2,726
Admitted during year ending September 30, 1901:			
On original commitments:			
From residences.....	213	232	445
By transfers from county houses.....	5	3	8
By transfers from other institutions for in- sane.....	15	13	28
Total number under treatment during year.....	1,431	1,776	3,207
Daily average population.....	1,217	1,566	2,783
Capacity of institution.....	909	1,296	2,205
Discharged during the year:			
As recovered.....	68	67	135
As improved.....	27	37	64
As unimproved.....	12	6	18
As not insane.....	3	1	4
Died.....	108	96	204
Whole number discharged during the year.	218	207	425
Remaining October 1, 1901.....	1,213	1,569	2,782

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	Oct. 1st. 1895
Total acreage of grounds and buildings.....	889.74 $\frac{2}{3}$
Value of real estate, including buildings.....	\$3,700,000 00
Value of personal property.....	180,609 08
Acreage under cultivation.....	237

Receipts during year, maintenance fund :

Balance on hand October 1, 1900 (overdraft)	\$4,386 38
From State Treasury for maintenance on estimates 1 to 12 inclusive.....	458,500 00
From reimbursing patients.....	11,804 15
From all other sources	4,898 78

Total receipts for maintenance.....	\$475,202 93
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Total receipts from State Commission in Lunacy for extraordinary improvements... ..	\$55,700 79
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Total receipts from manufacturing funds.....	\$7,714 75
--	------------

Disbursements during year for maintenance :

Estimate No. 1. For officers' salaries.....	\$21,935 63
Estimate No. 2. For wages.....	142,861 09
Estimate No. 3. For provisions and stores.	157,510 74
Estimate No. 4. For ordinary repairs.	6,549 72
Estimate No. 5. For farm and grounds.....	20,387 73
Estimate No. 6. For clothing.....	22,475 07
Estimate No. 7. For furniture and bedding	8,186 18
Estimate No. 8. For books and stationery.....	3,169 14
Estimate No. 9. For fuel and light.	57,270 04
Estimate No. 10. For medical supplies.....	3,056 62
Estimate No. 11. For miscellaneous expenses.....	18,333 75
Estimate No. 12. For transportation.....	2,593 95

Total disbursements, estimates 1 to 12 inclu- sive	\$464,329 66
---	--------------

Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy	\$55,922 77
Total disbursements during year, manufacturing fund, Chapter 326, Laws 1900	\$8,560 00
Remitted to State Treasurer, sundry receipts, Chapter 580, Laws of 1899	\$12,403 80
Balances October 1, 1901 :	
General maintenance fund (overdraft)	\$3,666 91
Apportionments by State Commission in Lunacy for extraordinary improvements	22,719 21
Manufacturing fund (overdraft)	845 25
Weekly per capita cost on daily average number of patients, estimates 1 to 12, inclusive	\$3 208
Maximum rate of wages paid attendants :	
Men	\$30 00
Women	25 00
Minimum rate of wages paid attendants :	
Men	\$20 00
Women	14 00
Proportion of day attendants to average daily population	1 to 9.9
Proportion of night attendants to average daily population	1 to 48.8
Percentage of daily patient population engaged in some kind of useful occupation	57.84
Estimated value of farm and garden products during year	\$16,144 41
Estimated value of articles made or manufactured by patients during year	45,384 70

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
MORAL :							
Adverse conditions (such as loss of friends, business troubles, etc.)....	19	20	39	7	5	12	2
Mental strain, worry and overwork (not included in above)....	13	20	33	8	6	14	2
Religious excitement...	1	2	3	2	.....	2	1
Love affairs (including seduction).....	.....	7	7	.....	2	2	.....
Fright and nervous shock	4	7	11	2	1	3	4
PHYSICAL :							
Intemperance.....	36	10	46	8	2	10	16
Venereal diseases.....	2	1	3	.....	.....	.....	.....
Masturbation.....	6	1	7	.....	.....	.....	1
Sunstroke.....	4	2	6	1	.....	1	2
Accident or injury....	11	1	12	2	.....	2	1
Parturition and puerperium.....	.....	16	16	.....	6	6	4
Change of life.....	.....	4	4	.....	1	1	1
Fevers.....	2	2	4	.....	.....	.....	1
Privation and overwork.	5	3	8	.....	.....	.....	1
Epilepsy.....	7	3	10	1	1	2	2
Other convulsive disorders.....	1	.....	1	.....	.....	.....	1
Diseases of skull and brain.....	1	.....	1	.....	.....	.....	.....
Old age.....	6	15	21	.....	4	4	6
Epidemic influenza....	2	1	3	.....	.....	.....	.....
Abuse of drugs.....	1	.....	1	.....	.....	.....	.....
All other bodily disorders and ill health....	8	11	19	2	1	3	4
Hereditary.....	17	8	25	17	8	25	.....
Congenital defect.....	.....	2	2	.....	.....	.....	.....
Unascertained.....	84	111	195	7	8	15	125
Not insane.....	3	1	4	.....	.....	.....	.....
Total.....	233	248	481	57	45	102	174

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during
the year ending September 30, 1901

FORM	YEAR ENDING SEPTEMBER 30, 1901		
	Admitted	Recovered	Died
Mania, acute	80	45	6
Mania, recurrent	11	5	1
Mania, chronic	37	10	5
Melancholia, acute	156	64	7
Melancholia, simple	2	.....	.....
Melancholia, chronic	23	5	9
Alternating (circular) insanity .....	.....	1	.....
Paranoia	21	.....	6
General paralysis	52	.....	52
Dementia, terminal	69	.....	92
Epilepsy with insanity	12	3	24
Imbecility with maniacal attacks	14	2	1
Idiocy ..	.....	.....	1
Not insane*	4	.....	.....
Total	481	135	204

*Includes cases of alcoholism, drug habit, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year

DURATION PREVIOUS TO ADMISSION	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Under one month.....	8	12	20
One to three months.....	25	26	51
Three to six months.....	5	6	11
Six to nine months.....	3	1	4
Nine months to one year.....	1	.....	1
One year to eighteen months.....	2	.....	2
Eighteen months to two years.....	1	.....	1
Two to three years.....	2	1	3
Five to ten years.....	2	1	3
Ten to twenty years.....	.....	1	1
Unascertained ...	19	19	38
Total	68	67	135
PERIOD UNDER TREATMENT			
	Men	Women	Total
Under one month.....	1	.....	1
One to three months.....	11	2	13
Three to six months.....	21	21	42
Six to nine months.....	9	19	28
Nine months to one year.....	6	9	15
One year to eighteen months.....	8	9	17
Eighteen months to two years.....	.....	1	1
Two to three years.....	7	2	9
Three to four years.....	2	1	3
Four to five years.....	.....	2	2
Five to ten years.....	3	1	4
Total	68	67	135

TABLE No. 7

Showing the causes of death of patients who died during the current year

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Specific infectious diseases:			
Septicemia and pyemia.	1	1	2
Dysentery	13	7	20
Tuberculosis	23	26	49
Diseases of the digestive system:			
Diseases of the stomach		1	1
Diseases of the intestines	2	10	12
Diseases of the respiratory system:			
Diseases of the lungs	10	11	21
Diseases of the circulatory system:			
Diseases of the heart	5	12	17
Arterio-sclerosis	3	1	4
Diseases of the blood and ductless glands:			
Diseases of the genito-urinary system	4	6	10
Diseases of the nervous system:			
Diseases of the nerves		1	1
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions)	3	5	8
Epilepsy	7	3	10
Mental diseases:			
Exhaustion of acute mental disease . . 3)	3	2	5
Exhaustion of chronic mental disease . 2)			
General paralysis of the insane	33	6	39
Suicide		1	1
Malignant new growths or cancer	1	3	4
Total	108	96	204

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year

	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Paternal branch.....	16	6	22
Maternal branch.....	12	12	24
Paternal and maternal branches.....	2	.....	2
Collateral branches.....	17	20	37
No hereditary tendency.....	93	120	213
Unascertained.....	93	90	183
Total.....	233	248	481

TABLE No. 9

Showing civil condition of patients admitted during the current year

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Single.....	116	107	223
Married.....	102	105	207
Widowed.....	15	33	48
Divorced.....	.....	1	1
Unascertained.....	.....	2	2
Total.....	233	248	481

TABLE No. 10

Showing degree of education of patients admitted during the current year

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Collegiate	9	2	11
Academic	5	7	12
Common school.....	173	167	340
Read and write.....	12	12	24
Read only.....	3	6	9
No education.....	9	14	23
Unascertained.....	22	40	62
Total	233	248	481

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year

DURATION PREVIOUS TO ADMISSION	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Under one month	8	5	13
One to three months	17	12	29
Three to six months	4	7	11
Six to nine months	12	3	15
Nine months to one year	4	3	7
One year to eighteen months	4	4	8
Eighteen months to two years	4	3	7
Two to three years	3	7	10
Three to four years	4	3	7
Four to six years	4	4	8
Six to ten years	2	8	10
Ten to twenty years	2	4	4
Twenty years and over	2	6	8
Unascertained	40	27	67
Total	108	96	204
PERIOD UNDER TREATMENT			
	Men	Women	Total
Under one month	11	6	17
One to three months	17	13	30
Three to six months	15	6	21
Six to nine months	10	8	18
Nine months to one year	4	4	8
One year to eighteen months	14	19	33
Eighteen months to two years	1	1	2
Two to three years	13	20	33
Three to four years	1	2	3
Four to six years	8	3	11
Six to ten years	7	5	12
Ten to twenty years	5	5	10
Twenty years and over	2	4	6
Total	108	96	204
Average duration of insane life (giving years and tenths)	3.2	3.7	3.4

TABLE No. 12

Showing ages of those admitted during the current year

AGES	YEAR ENDING SEPTEMBER 30, 1901.		
	Men	Women	Total
From fifteen to twenty years.....	17	12	29
From twenty to twenty-five years.....	31	37	68
From twenty five to thirty years.....	32	34	66
From thirty to thirty-five years.....	30	24	54
From thirty-five to forty years.....	37	34	71
From forty to fifty years.....	45	44	89
From fifty to sixty years.....	23	37	60
From sixty to seventy years.....	15	15	30
From seventy to eighty years.....	2	11	13
From eighty to ninety years.....	2	.....	1
Total	233	248	481

TABLE No. 13

Showing ages of those discharged recovered during the current year

AGES	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
From ten to twenty years.....	10	5	15
From twenty to thirty years.....	19	29	48
From thirty to forty years.....	21	12	33
From forty to fifty years.....	9	10	19
From fifty to sixty years.....	6	7	13
From sixty to seventy years.....	2	3	5
From seventy to eighty years.....	1	1	2
- Total	68	67	135

TABLE No. 14

Showing ages of patients who died during the current year

AGES	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
From 15 to 20 years.....	1	2	3
From 20 to 25 years.....	4	4	8
From 25 to 30 years.....	7	5	12
From 30 to 35 years.....	8	9	17
From 35 to 40 years.....	11	10	21
From 40 to 50 years.....	34	17	51
From 50 to 60 years.....	20	15	35
From 60 to 70 years.....	14	19	33
From 70 to 80 years.....	8	14	22
From 80 to 90 years.....	1	.....	1
From 90 to 100 years.....	.....	1	1
Total	108	96	204

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month	35	33	68
One to three months	54	54	108
Three to six months	27	22	49
Six to nine months	17	14	31
Nine months to one year	2	4	6
One year to eighteen months	13	15	28
Eighteen months to two years	6	7	13
Two to three years	5	8	13
Three to four years	4	4	8
Four to five years	2	6	8
Five to ten years	4	12	16
Ten to fifteen years	2	4	6
Fifteen to twenty years	3	.....	3
Twenty to thirty years	1	2	3
Unascertained	58	63	121
Total	233	248	481

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month	6	6	12
One to three months	36	54	90
Three to six months	47	43	90
Six to nine months	39	24	63
Nine months to one year	25	37	62
One year to eighteen months	82	93	175
Eighteen months to two years	42	46	88
Two to three years	294	618	912
Three to four years	78	97	175
Four to five years	61	50	111
Five to ten years	233	134	367
Ten to fifteen years	137	141	278
Fifteen to twenty years	70	84	154
Twenty to thirty years	42	102	144
Thirty years and upwards	21	40	61
Total	1,213	1,569	2,782

TABLE No. 17

Showing the occupation of those admitted during the current year

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Professional :			
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.....	10	.....	10
Commercial :			
Bankers, merchants, accountants, clerks, sales- men, shopkeepers, shopmen, stenographers, typewriters, etc.	53	5	58
Agricultural and pastoral :			
Farmers, gardeners, herdsmen, etc.	3	.....	3
Mechanics at out-door vocations :			
Blacksmiths, carpenters, engine fitters, saw- yers, painters, police, etc.....	31	....	31
Mechanics, etc., at sedentary vocations :			
Bootmakers, bookbinders, compositors, weav- ers, tailors, bakers, etc.....	42	.....	42
Domestic service :			
Waiters, cooks, servants, etc.....	9	122	131
Educational and higher domestic duties :			
Governesses, teachers, students, housekeepers, nurses, etc.....	.....	87	87
Commercial :			
Shopkeepers, saleswomen, stenographers, typewriters, etc.....	1	.....	1
Employed in sedentary occupation :			
Tailoresses, seamstresses, bookbinders, factory workers, etc.....	10	14	24
Miners, seamen, etc.....	6	.....	6
Laborers	55	.....	55
No occupation	11	19	30
Unascertained	2	1	3
Total.....	233	248	481

TABLE No. 18

Showing the nativity of patients admitted during the current year

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901		
	Men	Women	Total
Australia		1	1
Austria	4	3	7
Canada	1	4	5
China	2		2
Denmark	2	3	5
England	2	7	9
Germany	34	31	65
Greece	2		2
Hungary		2	2
Ireland	24	56	80
Italy	5	4	9
Norway	3	3	6
Nova Scotia		1	1
Newfoundland	1		1
Poland	3	3	6
Russia	9	8	17
Scotland	3	1	4
Sweden	9	4	13
Switzerland	2	1	3
United States	125	114	239
Venezuela		1	1
West Indies	2		2
Unascertained		1	1
Total	233	248	481

TABLE No. 19

Showing the residence by counties and classification of patients admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany			
Allegany			
Broome			
Cattaraugus			
Cayuga			
Chautauqua			
Chemung			
Chenango			
Clinton			
Columbia			
Cortland			
Delaware			
Dutchess			
Erie			
Essex			
Franklin			
Fulton			
Genesee			
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings	448		448
Lewis			
Livingston			
Madison			
Monroe			
Montgomery			
Nassau	11		11
New York	2		2
Niagara			
Oneida			
Onondaga			
Ontario			
Orange			
Orleans			
Oswego			
Otsego			
Putnam			
Queens	11		11
Rensselaer			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
Richmond.....
Rockland.....
St Lawrence.....
Saratoga.....
Schenectady.....
Schoharie.....
Schuyler.....
Seneca.....
Steuben.....
Suffolk.....	9	.....	9
Sullivan.....
Tioga.....
Tompkins.....
Ulster.....
Warren.....
Washington.....
Wayne.....
Westchester.....
Wyoming.....
Yates.....
Soldiers' Home.....
Total.....	481	.....	481

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES.	PUBLIC		
	Men	Women	Total
Albany			
Allegany			
Broome			
Cattaraugus			
Cayuga			
Chautauqua			
Chemung			
Chenango			
Clinton	1		1
Columbia			
Cortland			
Delaware			
Dutchess			
Erie			
Essex			
Franklin			
Fulton			
Genesee			
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings	912	942	1,854
Lewis			
Livingston			
Madison			
Monroe			
Montgomery			
New York	195	553	748
Nassau	14	7	21
Niagara			
Oncida	1		1
Onondaga	1		1
Ontario			
Orange			
Orleans			
Oswego			
Otsego			

Table No. 20—(Concluded)

COUNTIES	PUBLIC		
	Men	Women	Total
Putnam			
Queens	49	35	84
Rensselaer			
Richmond	2	1	3
Rockland			
St Lawrence			
Saratoga			
Schenectady			
Schoharie			
Schuyler			
Seneca			
Steuben			
Suffolk	38	31	69
Sullivan			
Tioga			
Tompkins			
Ulster			
Warren			
Washington			
Wayne			
Westchester			
Wyoming			
Yates			
Unascertained			
Total	1,213	1,569	2,782

SIXTH ANNUAL REPORT
OF THE
MANAGERS
OF THE
MANHATTAN STATE HOSPITALS
AT NEW YORK
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901
(THE MANHATTAN STATE HOSPITAL, EAST—WARD'S ISLAND)

OFFICERS

BOARD OF MANAGERS

HENRY E. HOWLAND	JOHN McANERNEY
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LOUIS C. PETTIT, M. D.....	Second Assistant Physician
D. S. SPELLMAN, M. D.....	Assistant Physician
JOHN W. WICKLIFFE, M. D.....	Assistant Physician
J. RUDOLPH KNAPP, M. D.....	Junior Physician
ARTHUR B. WRIGHT, M. D.....	Junior Physician
C. FLOYD HAVILAND, M. D.....	Junior Physician
CHESTER L. CARLISLE, M. D.....	Junior Physician
FRANK L. GROSVENOR, M. D.....	Junior Physician
ALTON L. SMILEY, M. D... ..	Junior Physician
JEROME E. YOUNG, M. D	Medical Interne

Purchasing Steward

FREDERICK A. WHEELER

Resident Steward

ROBERT J. PYE

REPORT OF MANAGERS

To the State Commission in Lunacy

In compliance with the requirements of the Insanity Law, the managers of the Manhattan State Hospitals beg to herewith present their sixth annual report for the year ending September 30, 1901.

The treasurer's report and the superintendents' reports are also incorporated in the report of the managers.

STANDING AND SPECIAL COMMITTEES

The following committees have been in active operation during the past year:

Finance Committee—Henry H. Hollister, chairman; John McAnerney and Isaac N. Seligman.

House and Visiting Committee—Eleonora Kinnicutt, chairman; Louisa Pierpont Satterlee and George E. Dodge.

Building Committee—Henry H. Hollister, chairman; Eleonora Kinnicutt and George E. Dodge.

The members of the board, and particularly of the visiting committee, have made regular inspections of the various branches of the hospital, and have reported as to these inspections at the regular monthly meetings of the board.

Henry H. Hollister has paid, as usual, special attention to and has taken interest in the work on the new colony at Central Islip, and has made constant reports to the board as to the progress of the work there.

CONDITION OF THE INSTITUTION

With one exception the general condition of the buildings connected with the hospital is good. The exception referred to is that of the east building of the East hospital, which is at present occupied by 640 men, and which is to be occupied during the month by 500 women from Blackwell's Island. This east

building is still sadly out of repair, and is not in a safe or sanitary condition for these inmates.

The board is greatly in hopes that necessary repairs to this building will be allowed by the Commission. The board does not ask for any extravagant repairs, but simply those that would make the building safe and reasonably comfortable for these inmates.

There is now in process of erection at the West hospital two new dining-rooms. When these are finished they will add greatly to the comfort and convenience of the patients.

At the Hospital, East, a new kitchen is being erected. This kitchen was very much needed, and will be of great service.

The improvements on the new colony at Central Islip are progressing favorably, and when the entire colony is finished it will be one of the most complete and satisfactory hospitals for insane in the whole State.

WORKING FORCE OF THE HOSPITAL

The working force of the hospital, including all the physicians, employees, nurses and attendants of various grades, has been quite satisfactory during the year, and the training school particularly has shown very satisfactory results.

GENERAL MANAGEMENT OF THE HOSPITAL

The board begs to report that the general management of the hospitals during the past year, under the care of the three superintendents, has been most satisfactory. The employees and junior officers have kept steadily at their work, and the whole condition of the hospitals, in cleanliness and in general efficiency, has been of the very best. Each of the three superintendents has worked very hard and has displayed a great desire for the very best welfare of the hospital under his control.

For the board of managers.

GEORGE E. DODGE

Secretary

REPORT OF THE TREASURER

NEW YORK, November 1, 1901

HON. HENRY E. HOWLAND, *President Board of Managers, Manhattan State Hospitals*

Dear Sir.—Herewith please find the treasurer's annual report for Manhattan State Hospital, East, general fund, for the year ending September 30, 1901.

Receipts

From State treasury for maintenance on estimates

1 to 12, inclusive.....	\$348,285 00
From reimbursing patients.....	5,468 52
From all other sources.....	9,854 27
Total receipts for maintenance.....	\$363,607 79

Expenditures

Deficit, October 1, 1900.....	\$9,405 57
Estimate No. 1, for salaries.....	22,594 77
Estimate No. 2, for wages	112,759 01
Estimate No. 3, for provisions and stores.....	111,320 71
Estimate No. 4, for ordinary repairs.....	6,015 31
Estimate No. 5, for farm and grounds.....	5,427 73
Estimate No. 6, for clothing	24,229 99
Estimate No. 7, for furniture and bedding.....	9,688 23
Estimate No. 8, for books and stationery.....	2,969 51
Estimate No. 9, for fuel and light.....	19,365 37
Estimate No. 10, for medical supplies.....	3,768 97
Estimate No. 11, for miscellaneous expenses.....	24,473 32
Estimate No. 12, for transportation	754 65
Remitted to State treasurer.....	5,729 49
Balance on hand September 30, 1901.....	5,105 16

Total expenditures during year..... \$363,607 79

Very respectfully

W. H. KIMBALL

Treasurer

NEW YORK, November 1, 1901

Hon. HENRY E. HOWLAND, *President, etc.*

Dear Sir.—Herewith please find the treasurer's annual report for Manhattan State Hospital, East, special fund, for the year ending September 30, 1901.

Receipts

Total receipts from State Commission in Lunacy	
for extraordinary improvements.....	\$22,993 30

Expenditures

Total disbursements during year for extraordinary	
improvements under apportionments by State	
Commission in Lunacy.....	\$22,993 30

Very respectfully

W. H. KIMBALL

Treasurer

NEW YORK, November 1, 1901

Hon. HENRY E. HOWLAND, *President, etc.*

Dear Sir.—Herewith please find the treasurer's annual report of the general manufacturing fund, Manhattan State Hospitals, for the year ending September 30, 1901.

Receipts

Total receipts from manufacturing fund.....	\$25,739 01
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Expenditures

Total disbursements during year.....	\$20,078 34
Balance on hand September 30, 1901.....	5,660 67
	<hr/>
	\$25,739 01

Very respectfully

W. H. KIMBALL

Treasurer

MANHATTAN STATE HOSPITAL, EAST

OFFICE OF THE SUPERINTENDENT

NEW YORK, *October 25, 1901*HON. HENRY E. HOWLAND, *President, etc.*

My Dear Sir.—In accordance with the provisions of chapter 545, Laws of 1896, I beg to submit the report of the operations of the Manhattan State Hospital, East, for the fiscal year ending September 30, 1901, in order that it may be incorporated in the sixth annual report of the board of managers of the Manhattan State Hospital.

To this report are added the usual statistical tables, giving in detail the history of the hospital for the year. My reports as superintendent, presented at the regular monthly meetings of your board, are also added, and render it unnecessary to greatly extend the scope of the present summary.

Additions to the population have been limited during the year to the ordinary admission of patients from the pavilion for the insane at Bellevue Hospital, and, in a few cases, from their homes. Discharges have been, in the main, to their homes, of patients recovered or sufficiently improved to be relieved from hospital restraint, or through transfers, upon orders of the State Commission, to the various private hospitals and to other State hospitals, particularly to the branch of the Manhattan State Hospital at Central Islip, to fill vacancies therein. It had been expected that the progress in building operations at the last named hospital would have been such as to permit of a general transfer, and thus of the relief, to some extent at least, of the overcrowding which has so seriously affected the Manhattan State Hospital, East. This desirable end has not, however, been reached within the year, although promise is now made that such transfer will soon be possible, and the selection of patients therefor is now in course of being made.

The following condensed table shows the changes in population as between the commencement and close of the year, and as affected by admissions, discharges, transfers and deaths:

	Male
Number of insane in care of hospital October 1, 1900..	1,847
Admitted during the ensuing year.....	733
Total number under treatment.....	2,580
Number of patients discharged during the year.....	329
Number of patients died during the year.....	284
Total	613
Number of patients remaining September 30, 1901....	1,967

AMUSEMENTS

The amount of the appropriation for the amusement fund of the hospital—at the rate of three cents a week for each patient—has been expended in continuance and extension of the lines summed up in former reports. The hospital band, under the leadership of Mr. C. J. Crowley, bandmaster of the Eighth Regiment of the New York State National Guard, has continued to improve with further experience and practice, and performs regularly upon three days of each week at the adjoining hospital, the Manhattan State Hospital, West, and for the three remaining week days at this hospital. Its services are also availed of upon special occasions for concerts, dancing parties, etc. The regular observance of holidays, national and State, including Arbor Day, Memorial Day, Independence Day and Labor Day, was had during the year, and games and sports of different kinds engaged in both by patients and employees, for which prizes were provided from the amusement fund. Throughout the winter months, and during the Christmas holidays especially, indoor amusements, with concerts, magic lantern entertainments and other features, were substituted for the outdoor sports. A very satisfactory addition to the means of amusement has been made in the erection, in the basement of one of the wings of the main building, of a double bowling alley, fully equipped, and which is used at stated hours of each day by patients from the various wards. The officers and employees also have the use of the alley at times when it is

not required by the patients, and the general result of its installation and use has been to give entertainment and useful exercise to all classes.

TRAINING SCHOOL FOR NURSES

The training school attached to the hospital has completed, within the period covered by this report, the fifth year of its service. At the opening of the school on October 1, 1900, nineteen members returned to the sessions of the senior class, while sixty-one were enrolled as commencing their studies with the junior class. Examinations were held on May 10, 1901, and of fourteen members of the senior class presenting themselves, thirteen were found to be proficient and were granted the regular diploma of the school. The examinations, as before and in accordance with the regulations applying to all State hospitals, were written, the questions being prepared by a committee of State hospital superintendents, with Dr. E. H. Howard, of Rochester, as chairman, and Dr. A. W. Hurd, of Buffalo, and Dr. William Mabon, of Ogdensburg, as members. The questions were forwarded to the superintendents sealed, and were not opened until the commencement of the examination. The papers presented were of a high order, and the graduates may be considered as thoroughly equipped for future service in the care of the insane, whether within the hospital or in the general practice of nursing at patients' homes. Of the junior class but twenty-three continued their studies throughout the training school year, and presented themselves for examination, and of these but fourteen passed successfully. They will form the nucleus of the senior class at the commencement of the sixth year of the school's existence, October 1, 1901.

The usual exercises attending the presentation of diplomas were arranged for the afternoon of Wednesday, May 22, 1901, and the following programme prepared. Owing to the unavoidable absence of the president, the chair was occupied by Mr. John McAnerney of the board of managers. The list of names of the members of the graduating class is subjoined, in connection with the programme.

FOURTH ANNUAL GRADUATION EXERCISES OF THE
TRAINING SCHOOL FOR NURSES

WARD'S ISLAND, NEW YORK CITY, MAY 22, 1901

Programme

Overture, "Si j'étais Roi", Adam, hospital band.

Invocation.

Address, Hon. Henry E. Howland, president of the board of managers, chairman.

Presentation of graduating class by John McAnerney, Esq., of the board of managers.

March, "Hail to the Spirit of Liberty", Sousa, hospital band.

Presentation of diplomas by Mrs. Eleonora Kinnicutt and Mrs. Louisa Pierpont Satterlee, of the board of managers.

Selection, "San Toy", Jones, hospital orchestra.

Addresses by Rev. William R. Huntington, D. D., and Hon. Frederick Peterson, M. D.

Benediction.

Paraphrase, "Melody in F", Rubenstein, hospital band.

Graduates

Bartleman, Walter W.	McDonnell, William
Carroll, Thomas	McDonnell, William F.
Kelly, Valentine	McNamara, Patrick
Kelly, E. F.	O'Reilly, James
Kelly, James	Reilly, Patrick
Ludgate, George A.	Stephens, Edward M.
	Walsh, Thomas

IMPROVEMENTS

Of the extended list of extraordinary improvements rendered necessary by the generally unsatisfactory condition of the several buildings in the matter of repairs, which has been dwelt upon from year to year in preceding reports, but few items were disposed of during the year. The most important has been the commencement, long delayed, of work upon the new kitchen building. The difference of opinion as to the relative merits of

a new kitchen building and of extensive alterations and betterments of the old kitchen, located in the basement of the office building of the main hospital, was at length settled in favor of the former procedure, and under contract entered into on March 28, 1901, for the building and necessary supplemental contracts for lighting, plumbing, steamfitting, etc., work has progressed though slowly. The contract for the building proper stipulated for its completion upon October 19, 1901, but at the present writing (six months after its being entered upon) such slow progress has been made that there can be no possibility of the kitchen's being ready for occupation at the time named, or probably for two or three months later. Another most important item upon the list named covered renewals of the plumbing, which had been in use in the various sections for many years, was of inferior construction and arrangement in the first place and had greatly deteriorated with continual use, and without necessary year-to-year repairs. Unfortunately, while renewals were required in seven different wings of the hospital buildings, it was decided to make the change in but one, and that, with the customary delays upon the part of the contractor, is, although the contract required its completion on August 3, 1901, but barely commenced. The necessity for continuing this work, and as rapidly as possible embracing the remaining toilet sections, becomes still more urgent, and should receive prompt and complete attention in the year now commencing.

Of minor improvements, renewals and repairs included in the list contained in the last annual report, the following have been completed within the year:

Metal ceiling, main hall.

Stained glass windows, church and amusement hall.

New staircases in east and west wings.

Plate warmers for dining-rooms of wards 1 and 12 and hospitals 1 and 2.

Food wagons.

New sinks, hospital wards.

Water tank, east building.

Hoods on urns, east building.

New furniture for wards 1 and 2, 14 and 22.

Shade trees.

Skylights in printing office.

In the case of the following items work has been commenced and is now in progress:

Renewals of plumbing.

Metal ceilings, wards 1 and 23.

Window guards.

Re-covering steam and hot water pipes.

Food wagons.

Repairs to roof of east building boiler house.

Other items upon the list have not yet received attention, and are, for the most part, repeated upon the list for next year herewith presented. Apart from the new structure, the kitchen building and its appointments, the estimated cost of the alterations and repairs comprised in the list submitted for the year commencing October 1, 1900, was \$38,816; the amount already expended for such work completed within the year is \$3,684.70, and the amount allotted for work now in progress is \$4,390. In other words, but \$8,074.70 has been allowed out of an estimated necessary expenditure of \$38,816.

The list of extraordinary repairs and improvements submitted for the current year is as follows:

EXTRAORDINARY REPAIRS AND IMPROVEMENTS FOR THE FISCAL YEAR COMMENCING OCTOBER 1, 1901

Repairing and painting interior of church and amusement hall	\$1,200
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This work is urgently needed in order to put the church and amusement hall in proper condition for continued use. No satisfactory repairs and but little painting has been done since the building was erected in 1870. The repairs and painting have been proposed from time to time, but the condition of the roof and outside walls was such that the Commission did not deem it

proper to make any expenditure upon interior work until the walls and roof should first have been repaired. This is now in course of being done, and the interior work can proceed as soon as an allotment shall be made.

Stained windows of church to be releaded and repaired. \$100

This repair is a proper and necessary sequence to the repairs of the roof, and a preliminary to the interior repairs and decoration comprised in the above item.

Repairing and painting six stairways..... \$1,050

Four of the six stairways referred to have within the past year been repaired, so far as the steps, risers and platforms are concerned, new slate replacing the old and worn out cement. The repairing and painting now proposed is intended to put the walls and ceilings in as good condition as the steps, etc. Two additional stairways, while not requiring new steps, require the same repairs to plaster walls, etc., and repainting, as the four others.

Cementing salt-water bath \$1,400

The salt-water bath is used continuously throughout the warmer months by the patients of both this hospital and the West hospital. The patients of the latter hospital have used the bath during the past summer to the number of 881 on a single day, and the patients of the East hospital to the number of 1,423. The bath was constructed by enlarging and straightening the lines of the former quarry. A portion of the floor and walls is composed of solid rock, but the remainder is of loose sand and soil, so that the water soon becomes foul upon use. The intention is to refloor the bath with cement, and to patch up the walls in the same way, so far as necessary. The dimensions of the bath are 204 feet by 44 feet, and the estimated cost of the cementing, as furnished by the State Architect's office, is 15 cents a square foot.

Repairs, etc., ward 17..... \$500

This ward is a basement ward which has been occupied by

patients as a necessity in the overcrowded condition of the hospital. It is expected that it will be vacated shortly in view of the opening of the new buildings at Central Islip, and that its use as an ordinary ward and sleeping rooms will be abandoned. The amount asked for is necessary to put it in repair and fit it for occupation for shops, it being the intention to remove to it the mat and broom shop, etc., still remaining in the industrial building on the west side of Ward's Island.

Tents and equipment \$1,000

During the past year \$532 has been expended in the purchase of tents and equipment, and an average of sixty patients (tuberculosis and filthy cases) have been treated therein. The success of the experiment has been so great that it is intended, with the approval of the Commission, to extend the use of such tents during the coming season. Apart from the satisfactory results to the patients and to the hospital from the former's improved condition, the assignment for, say, six months of the year of patients to these tents will enable us to temporarily vacate sections of the building where repairs are required and where they cannot properly be done while the patients are still in residence. It also affords opportunity for thorough ventilation, disinfection and cleaning of the wards vacated.

Shed for vehicles and general storage purposes, 150 x 18
feet \$1,000

Three sheds were asked for on last year's estimate but only two were allowed, and the above item is inserted in order to complete the number requisite for the proper care of the fire apparatus, vehicles, etc., and the lodging of the blacksmith shop, tool house, etc.

Trees \$100

It has been customary from year to year to plant young trees about the hospital grounds, as the latter are graded and laid out. The above item is intended to provide for the purchase, spring and fall, of the same number at the same cost as last year.

Conduit from main boiler house to attendants' home.

4 x 5 feet, length 420 feet..... \$2,500

This conduit was among the items submitted to the Commission one year since, and the necessity for its reconstruction has increased from the fact that one year's further use has served to place it in still worse condition than as then reported. It is a wooden conduit erected in 1889, and is in very bad condition through decay and want of repairs. The following note from the State Architect's office, attached to this item in the list as previously submitted, is repeated here for the information of the Commission:

"This conduit leading from the boiler house to the home and connected with the hospital and also the laboratory is in bad condition; it is a wooden conduit and badly decayed and not large enough to go in to make repairs should it be necessary. This conduit carries 5-inch steam pipe and 4-inch return to house and return pipes from hospital and laboratory, hot-water pipe to home and also electric light, fire alarm and telephone wires to home. This conduit is about 420 feet long. I would recommend the building of a brick conduit in the place of this old wooden one. Contractors estimates would be necessary to determine cost of new conduits."

Posts and trestle for support of upper floors and roof

of main boiler house..... \$1,000

Eight years since, in the course of the repairs to the boiler house, the original supports were removed and temporary wooden timbers substituted. These are now in such a condition as to entail danger, and it is proposed to replace them with iron posts and trestle.

Linoleum for main hall, 464 square yards..... \$475

The main hall of the main hospital building has been put in good condition by the erection of a new metal ceiling and the repair and revarnishing of all woodwork. The floor is in very poor condition, after thirty years' wear, and should properly be renewed entirely. In view of the interruption to the business of

the hospital which would result from this, and the fact that it can be postponed for some years by placing a substantial covering upon it, this item is submitted.

New steam and return mains, traps, valves, labor, etc., to provide a new piping system for heating plants through the entire basement of the main building. The present mains and branches of the system are worn out, requiring continual repairing, and eventually will cost more for repairs than the new system suggested, which only consists of one main, and is therefore more economical, effecting a saving of at least ten per cent. of our present fuel consumption \$9,000

The above note is repeated from the list of last year. The necessity for the changes referred to has increased with an additional year's use, and the necessity of attention to the matter is now urgent. The estimated cost at that time was \$9,000. The present cost will probably somewhat exceed this, and the State Architect has been requested to furnish a new estimate accordingly.

Furniture \$1,200

The above item is intended to provide for renewal and additions to the furniture of the several wards, etc., of the hospital. A similar sum was allowed last year. At present many of the tables are old and rough, supported on trestles, and the furniture generally is unsatisfactory and uncomfortable.

Repairs to roofs..... \$2,500

The roofs of the several buildings of the hospital require repairs from year to year, and the sum asked for is expected to suffice to keep up ordinary repairs in turn to the portions of the several roofs principally requiring them.

Repairs to coal dock..... \$500

This dock is in constant use for unloading the coal supply for the hospital (at the rate, of late, of 6,000 tons a year) as also

other deliveries of ice, sand, stone, manure, etc. The repairs include the renewing of the piles and strengthening the dock.

Repairing and painting interior of ward 8, main building \$2,500

This ward has been in continuous use during the thirty-one years of the occupation of the main building and without at any time being subjected to thorough overhauling and repairs. It has been occupied also by the uncleanly patients, and its condition is therefore so much the worse accordingly. It requires now a thorough renovation, relaying of floors, repairing of plaster and woodwork, doors, windows, window guards, and finally repainting. The necessity of this particular work has been observed and agreed to by the Commissioners upon several occasions of their visitations to the hospital, but it has been impossible to carry out the work heretofore, as the hospital was so overcrowded that the patients could not be removed from the ward, as will be necessary to afford proper opportunity for the work.

Iron columns in bakery \$500

The bakery, as it now stands, is a result of successive erections of small buildings side by side. The dividing walls, if removed, and support by columns provided for the roof would give much more space for convenient performance of the necessary work, especially since the establishment of a kneading machine, etc. All the baking for the east and west hospitals is done at this bakery and in a very economical way, and the small expenditure would be a great benefit.

General repairs, east building (glazing, painting, reputing sash, window screens, etc.) \$6,500

This building is nearly fifty years old, and has never been thoroughly repaired. It is now proposed to transfer women patients to it, and the necessity for general repairs becomes even greater than before. It has been inspected from time to time by the Commissioners, and as recently as the 18th inst., and

the necessity of the work described is apparent and its execution advised.

Renewals to plumbing..... \$16,200

Six thousand four hundred dollars was allowed for the above purpose by the Commission as its action upon the item when it appeared in the list of proposed repairs and improvements one year since. After many delays a contract was awarded for the repair of one section at the price of \$2,700. When it was proposed to at once commence work upon the second section the matter was deferred by the Commission. All the remaining lines of plumbing are in extremely poor condition, worn and leaking, and the fixtures and pipe are of old pattern and poor arrangement and construction. It is of the utmost urgency for the comfort and convenience and health of the patients that work should be progressed in this direction as rapidly as may be, with the necessity of doing the work while the patients remain upon the wards and are inconvenienced by the necessity of using remote lavatories, etc., in other wards while the work is being performed upon those in their own wards.

Steel ceilings \$1,200

For the past few years the original plaster ceilings throughout the several buildings which are out of repair, broken, and in a dangerous condition have been in course of replacement by steel ceilings. The above item is intended to provide during the current year for the renewal of ceilings in the portions of the buildings where they are now in the worst condition.

Spray bathrooms, east building—ventilation..... \$1,000

The spray bathrooms in the east building were established two years since to replace the antiquated bathrooms and fixtures attached to the several wards throughout the building. They have proven very useful and satisfactory in so far as the arrangement of fixtures, etc., is concerned, but a serious defect has developed owing to the absence of proper means of ventilation. The use of the hot spray fills the rooms with steam, and is also having an injurious effect upon the woodwork and other

materials of construction in the neighboring portions of the building. A proper means of ventilation is being considered by the State Architect, and an estimate of its probable cost is expected from that officer forthwith.

Change in electrical plant and lines..... \$1,000

This matter was submitted to the Commission last year, and has frequently been called to its attention and has been under consideration in the State Architect's office for some time. No definite plans have, however, as yet been formed, and no allotment has been made. The present condition is extremely unsatisfactory, the lighting supplied by the west hospital being unsatisfactory in many respects and being charged to this hospital at a rate which is, in our judgment, excessive. Apart from this, changes which were made some years since in the removal of the plant from the east to the west hospital have proven to have been ill-judged and unfortunate. Among the results has been the deprivation of the east hospital of any use of electrical power, such as was depended upon to operate machinery in use before the transfer. The change contemplated will improve the lighting conditions and restore and extend the use of power in the shops, kitchen, etc., and it is expected that the State Architect's office will supply the estimated cost, which is for the present left blank.

New steps upon fire-escapes, main and east building. \$5,500

At present the steps upon these fire-escapes are of wood, and they have become so worn by constant use for many years as to be in a dangerous condition, resulting in frequent accidents to patients, and must be renewed in some form without further delay. Inasmuch as they are contrary to law, which requires that such steps shall be of iron, it is thought that it is better to provide iron steps instead of renewing the wooden ones, and it is estimated that the cost of the iron steps will not be greatly, if at all, in excess of the cost of wooden ones.

Coal vault at Main Boiler House..... \$6,500

Upon last year's list of improvements a new shed for coal at

the main boiler house to replace an old one which was beyond repair was included at a cost of \$350. The list was returned with the following comment as to this particular item:

“Commissioner Osborn suggests bins or subterranean vaults. Recommends that estimate be prepared and forwarded.”

The present item and estimate (the latter being made by the State Architect's office) are submitted upon the present list in accordance with the recommendation above cited.

Remodeling of old kitchen, main building..... \$5,700

The new kitchen now in course of erection is expected to be completed and put in use before the close of the present calendar year. The intention has been, when the old kitchen should be freed, to so reconstruct it as to provide rooms for storage of supplies, for occupation as shops by working patients, and to so free the rooms on the main floor now occupied as offices by transferring the latter to the basement as to in turn free other rooms upon the upper stories, which could be occupied by employees now sleeping upon the wards, whose rooms in turn could be devoted to their proper use—that of the accommodation of patients. The cost of this improvement is now being estimated by the State Architect's office, and it is expected that his report will be forwarded to the Commission within a few days.

The items thus far enumerated have reference especially to this particular branch of the Manhattan State Hospital system. For the general benefit of all its branches repairs and renewals are required as follows:

MANHATTAN STATE HOSPITAL

General Administration Department

East One Hundred and Sixteenth street dock.....	\$3,525
Painting interior and exterior complete....	\$2,500
New leaders, gutters, etc.....	400
Repairs to planking and new gate.....	625

This dock is now in the sixth year of its use, and has received no repairs since its construction and the erection of the

building. Both are now in bad repair, and should receive attention without delay.

Freight dock, Ward's Island, replanking.....\$3,000

The planking or "deck" of this dock has been much worn by continuous use for the landing of supplies for the hospitals and of building material for contractors. It is now so worn as to be in a dangerous condition to pedestrians and horses, and requires renewal forthwith.

The main dock, or, more properly speaking, pier, at Ward's Island, commonly spoken of as the "passenger," to distinguish it from the "freight" pier, has for several years been in a dilapidated and unsafe condition. Work upon it has been, for one reason or another, postponed until its abandonment, through mere force of decay, is now imminent.

MEDICAL SERVICE

Considerable progress has been made during the year, and especially in its latter part, in extending the lines of medical treatment in the hospital. This has been due largely to the special interest taken in the matter by the present president of the State Commission in Lunacy, and that in turn to his former experience in the service of the Hudson River State Hospital and to his more recent and continuing service as a member of the board of consulting physicians and surgeons of the Manhattan State Hospital. The medical library, for the use of the members of the staff, has been increased by the addition of a considerable number of standard works, and several selected medical periodicals have been subscribed for.

Notable means of extending the scope of medical treatment of patients are the electro therapeutical and hydro therapeutical departments. In January, 1901, there was established in the reception ward a ten-plate static electrical machine with full X-ray equipment, and it has been systematically used since its installation. Its application has been particularly beneficial in

alcoholic cases bordering upon neuritis, after the subsidence of acute symptoms. Patients of this class have shown marked improvement, with disappearance of pains and stiffness, followed by general brightening of disposition and healthy reaction of muscles. Many of these cases have a tendency to remain in a dull, apathetic condition unless stimulating treatment is instituted as early as possible, and the faradic application appears to meet the requirements in a considerable degree. In slow, inactive cases, with a tendency to drift into dementia, a few sharp applications of the current daily keep them in the way of convalescence. Depressed, hysterical conditions are markedly benefited by an occasional mild application. Its value is apparent also in cases attended with symptoms of deranged secretory functions and arthritic affections, as well as in cases presenting local congestions. It has, too, a field of usefulness in cases of paralysis secondary to hemorrhage, emboli, thrombi, etc.

The X-ray has been used as a diagnostic means in cases of fractures and of obscure and ill-defined lesions, and the results obtained have been satisfactory. It has now established itself as one of the indispensable elements in the armamentarium of a well equipped hospital for the insane.

The hospital has, at the date of this report, nearly completed an equipment of modern hydro-therapeutic apparatus, in the main upon the principles advocated by Dr. Simon Baruch. The work of installing the apparatus has been performed by patients and employees under the supervision of Messrs. Frank Richter & Co. One of the larger dormitories connected with the receiving wards has been remodeled and provided with dressing rooms, hot-air cabinets, massage tables, etc.

The main features of the apparatus consist of improved circular, rain and perineal douches, and an Italian marble douche table with regulators, electric alarms, etc.; hot, cold and ice water, under high pressure, being supplied through automatic tanks and cylinders. The above apparatus provides for rapid changes of temperature and alternating douches over various portions of the body, by which powerful stimulating

and sedative effects can be produced. It embraces all the characteristics of the most modern obtainable apparatus.

Perhaps the most important incident in the history of the year, in so far as the more distinctly medical aspect is concerned, has been the introduction of out-door treatment in tents—first for tuberculous, and secondly for demented and uncleanly patients. Although it had been the practice in the hospital to isolate and quarantine the former, so far as practicable, the results have not been satisfactory; the large dimensions of the hospital wards, and their intimate association and connection in two extensive buildings rendered the segregation of these patients in any one of them difficult or impossible. In this emergency it occurred to me that, for a considerable portion of the year, at least, such of our phthisical patients as were not prevented by their mental condition might be quartered in tents, and that perfect isolation, and incidentally, better hygienic conditions, might thereby be secured. The results of the experiment thus inaugurated I now give in brief detail. In still briefer summary they may be stated as showing already that the tent treatment could be extended to all the phthisical patients in the hospital without regard to the form or phase of their insanities; that patients with other conditions complicating insanity might be transferred from wards to tents with advantage, and that benefit to the patient could be confidently looked for, not alone in the matter of the complicating disease or condition, but in that of the insanity itself. The benefit to other patients and to the employees also of the removal from the wards of the phthisical patients need not be dwelt upon. So much in brief for the advantages already resulting from the experiment in the four months of its trial. It is further believed that with the experience gained in these summer months, and with suggested improvements in equipment, it will be feasible to continue the use of the tents and the consequent advantages in the treatment of the sick and the protection of the well (so far as the matter of tuberculosis is concerned) well into the autumn and even possibly through the winter.

On June 5, 1901, forty phthisical cases, which included all acute cases of that disease in the Manhattan State Hospital, East, took up their residence in two large tents situated upon elevated ground, well drained and surrounded by shade trees, and commanding a full view of the river. Each tent contained twenty beds, and was of sufficient size to allow forty square feet of floor space to each bed. Such patients as were not confined to bed ate their meals in a small auxiliary dining tent, in which the necessary pantry work was also performed; and sleeping quarters for the nurses, a physicians' office, storerooms, etc., were provided in several smaller auxiliary tents. All food was cooked in and supplied from the main kitchen. Separate water supply and toilet appurtenances were supplied, and bathing facilities were afforded by portable bath-tubs situated in small tents adjoining the main tents, which also contained commodes for the use of such patients as were confined to their beds and unable to use the separate toilet provided for those who were able to be up and about. All linen was disinfected with carbolic acid previous to being sent to the laundry. Expectoration cups and cuspidors constantly held a 2 per cent solution of creolin, and the atmosphere was sprayed hourly during each day with disinfectant solutions which not only served their purpose as antiseptics, but also prevented flies and other insects from entering the tents. All scrubbing and cleaning were performed with a weak carbolic acid solution, and scrupulous asepsis was generally observed. The tubercular patients were completely isolated from the rest of the hospital population.

Symptomatic medicinal treatment was chiefly resorted to, especial reliance for the improvement of the patients being placed upon the hygienic measures employed. During the period from June 5th to October 1st forty-nine patients were treated in this camp, the original forty being augmented by nine other cases which were admitted during that time, and supplied the vacancies created by seven deaths and the transfer of two patients who were so improved as to be in no further need of treatment. Each patient was weighed on the first of each month

and a record kept showing the changes in weight. Of the forty-nine patients, thirty showed continuous progressive improvement from the inception of their treatment. They showed an average gain of $9\frac{1}{2}$ pounds during the period of nearly four months covered by this report, the greatest gain being $25\frac{1}{2}$ pounds and the smallest $\frac{1}{2}$ pound. Eighteen cases, on the other hand, failed to show any benefit during this period, but showed an average loss of $5\frac{1}{2}$ pounds. One case weighed the same upon October 1st as on June 5th. Such cases as failed to show physical improvement were in an advanced stage of phthisis when admitted to the camp, although but seven died during this period, making a death-rate of about 14.7-25 per cent. Of the patients who died, the average residence in the camp was one month and seventeen days, the longest residence being two months and nineteen days. The fatal result was hastened in two of these cases by the acute mania from which the patients suffered, while a third one suffered from agitated melancholia, which hastened his death. Of the other cases which failed to improve, the majority failed but slightly and were in a comfortable condition on October 1st. One notable benefit observed in connection with this treatment has been the speedy reduction of elevated temperatures, there being no case suffering from fever on admission which has failed to show a marked improvement in this respect. Night sweats have also been notable for their absence, while not a single case of haemoptosis occurred. The greatest benefit, however, appears in the increased appetite and the increased ability to assimilate food. Apart from the mere physical improvement, however, such cases as were suffering from a recoverable mental disorder invariably showed improvement amid the more cheerful surroundings incident to outdoor life, and without exception were anxious to remain in the camp. An important advantage, in addition to the benefit resulting to the patients concerned, lay in the complete isolation of those patients from the non-tubercular patients, as under no circumstances were they allowed to come in contact with patients not suffering from that disease.

On the 15th of July, 1901, twenty patients were selected for the camp; those who were most uncleanly in their habits, and the majority also bedridden. From the very outset the patients showed improvement. Their weight was taken on admission, and subsequently about every twenty days. At the second weighing (August 8th) every patient showed an increase in weight except one, and he weighed exactly the same as before. The highest gain was $8\frac{1}{2}$ pounds. At the third weighing (September 3d) still better results were shown. The highest gain was $18\frac{1}{2}$ pounds over the last record. The next weighing (October 2d) showed further improvement, every patient showing a gain over the last register, and one gaining 23 pounds. This last patient has gained 50 pounds since his admission to the camp, weighing 93 pounds on admission and 143 at present. The average gain per patient during the three months was 13 3-5 pounds. The lowest gain was 6 pounds, the highest 50 pounds. Eight of the patients when admitted weighed less than 100 pounds, and one weighed only 88 pounds, and all were greatly emaciated.

During the pleasant weather the tent curtains were rolled up and a free circulation of air was established, so that the patients were practically out of doors. Improvement in the uncleanly cases was marked, and at the end of the three months there are only three patients in the camp who might be so called and those have improved greatly.

During the warm weather it was with difficulty that the patients could be gotten out of bed, as they were perfectly contented to lie in bed and watch the passing boats. However, at least half the number in the camp was gotten up every day. The improvement mentally in a great many of the demented cases is remarkable. Some of the most stupid have brightened and take quite an interest in their surroundings, reading the papers and magazines daily. One, a stupid and demented boy who could never be induced to speak before but continually sat with bowed head, now converses with his family upon their visits. There is not a single case of the twenty who has not shown improvement both mentally and physically during the

three months of camp life, and the experiment has been so successful and so beneficial to those concerned that it is proposed next year to renew it upon a larger scale for the benefit of the two classes of cases already embraced in the plan and to extend it to other classes and especially to convalescents and to the working patients.

The assistance of this hospital has again been given to the several medical colleges of the city as in years past in the matter of furnishing patients for the clinical instruction of their students in the diagnosis of insanity. During the year patients have attended the clinic of Prof. Carlos F. MacDonald, at the University and Bellevue Hospital Medical College; and of Dr. Frederick Peterson, at the College of Physicians and Surgeons. The clinic of the Cornell University Medical College has been held at the hospital building by Dr. William Hirsch, clinical assistant to Prof. Allan McLane Hamilton.

MEDICAL STAFF

But few changes have taken place among the medical officers of the hospital during the year. The board of consulting physicians and surgeons remains unchanged. There has been one resignation of an assistant physician (Dr. Benjamin R. Logie) who had been appointed to the staff of the Government Hospital for the Insane in Washington, and who left to assume his new duties upon February 14th. Two junior physicians (Dr. Frank G. Hyde and Dr. Amasa P. Muir) resigned upon July 15th and August 15th, respectively, to enter upon the private practice of their profession. The vacancies detailed were filled by the promotion of Dr. John W. Wickliffe from the position of junior physician to assistant physician in place of Dr. Logie, and by the promotion of Drs. Chester L. Carlisle and Frank L. Grosvenor from the position of medical internes to that of junior physicians. The remaining vacancy as junior physician was filled by the appointment, from the eligible list of the State Civil Service Commission, of Dr. Alton L. Smiley, who had served as medical interne at the Buffalo State Hospital.

ACKNOWLEDGMENTS

The provision of reading matter for the patients of the hospital has been considerably enlarged in the course of the year covered by this report. The collections made by the Manhattan State Hospital's delivery wagon have been extended to embrace the Grand Central depot, the Union League Club, and the Fifth Avenue Hotel. These collections are made through arrangement with the Hospital Book and Newspaper Society, which for many years has supplied this and the other branches of the Manhattan State Hospital with large numbers of magazines, periodicals, newspapers, etc. Occasional collections are also made by the delivery wagon from the Hotel Netherland, the Lotos Club, and from the office of the book committee of the Hospital Book and Newspaper Society. Apart from the collections referred to, donations of reading matter have from time to time been made also by:

Mrs. Eleonora Kinnicutt, 39 East Thirty-fifth street.

Mrs. A. E. Macdonald, Ward's Island.

Miss E. V. Mahl, 200 West One Hundred and Thirty-eighth street.

Mr. H. W. Ott, 206 West One Hundred and Nineteenth street.
Harlem Wheelmen.

In all, in the course of the year, there have been collected through the channels of the Hospital Book and Newspaper Society 67,000 newspapers, and from that and other sources a full supply of magazines, illustrated papers, periodicals and other current literature.

As a final acknowledgment I desire to make record of my indebtedness to your board and to its individual members for a continuance during the year covered by this report of the courteous and considerate support and kindness which have marked our relations since the establishment of the hospital.

Very respectfully

A. E. MACDONALD

Superintendent

SUPERINTENDENT'S MONTHLY REPORTS

NEW YORK CITY, *October 10, 1900*HON. HENRY E. HOWLAND, *President Board of Managers*

My Dear Sir—The regular monthly tables required by the rules of your board have been placed upon file in your office for the month ending September 30, 1900.

No matters of special importance have occurred since the last general meeting of your board upon September 12th, requiring formal report. Upon October 1st sixty patients were transferred to the Manhattan State Hospital at Central Islip, ten to fill vacancies there and the remaining fifty to occupy the new buildings and to increase the census of that hospital.

At the last meeting of your board, as shown by the minutes, it was determined that "the action of the board in adopting a uniform shall stand; but it was decided, in the matter of the details of the uniform, that Dr. Macdonald shall be permitted to change them, always, however, keeping in mind that they must conform in a general way to those already adopted by the other two superintendents."

In accordance with this action of your board, I beg to submit a blouse, the regulation army fatigue blouse, as sufficiently closely resembling the uniform adopted by the Manhattan State Hospitals, West, and at Central Islip, while at the same time more fully, in my judgment, meeting the requirements of use by physicians in hospital service. I also beg to submit a bill of dress and sketches, which show another form of uniform, and request that your board shall decide which of the two shall be adopted. Whichever proposition meets approval, I would respectfully ask you to endorse the propositions which I now make, namely, that the idea of uniform must be followed out by purchase of the individual uniforms from one and the same firm, that they shall be made of the same cloth, of the same color and shade, with identical devices, etc.; that the uniform shall be worn in all its parts at all times when physicians are upon duty, and that the wearing of a portion of the uniform with a

portion of civilian dress and other such departures from uniformity shall not be allowed.

BILL OF DRESS

Coat—Double breasted; four gold buttons, State, on each side; one gold button on each sleeve; soutache braid around sleeve five inches from wrist; device in gold wire on each lapel.

Vest—Single breasted; no collar; six gold buttons, State.

Trousers—Plain, with narrow soutache braid outside of leg.

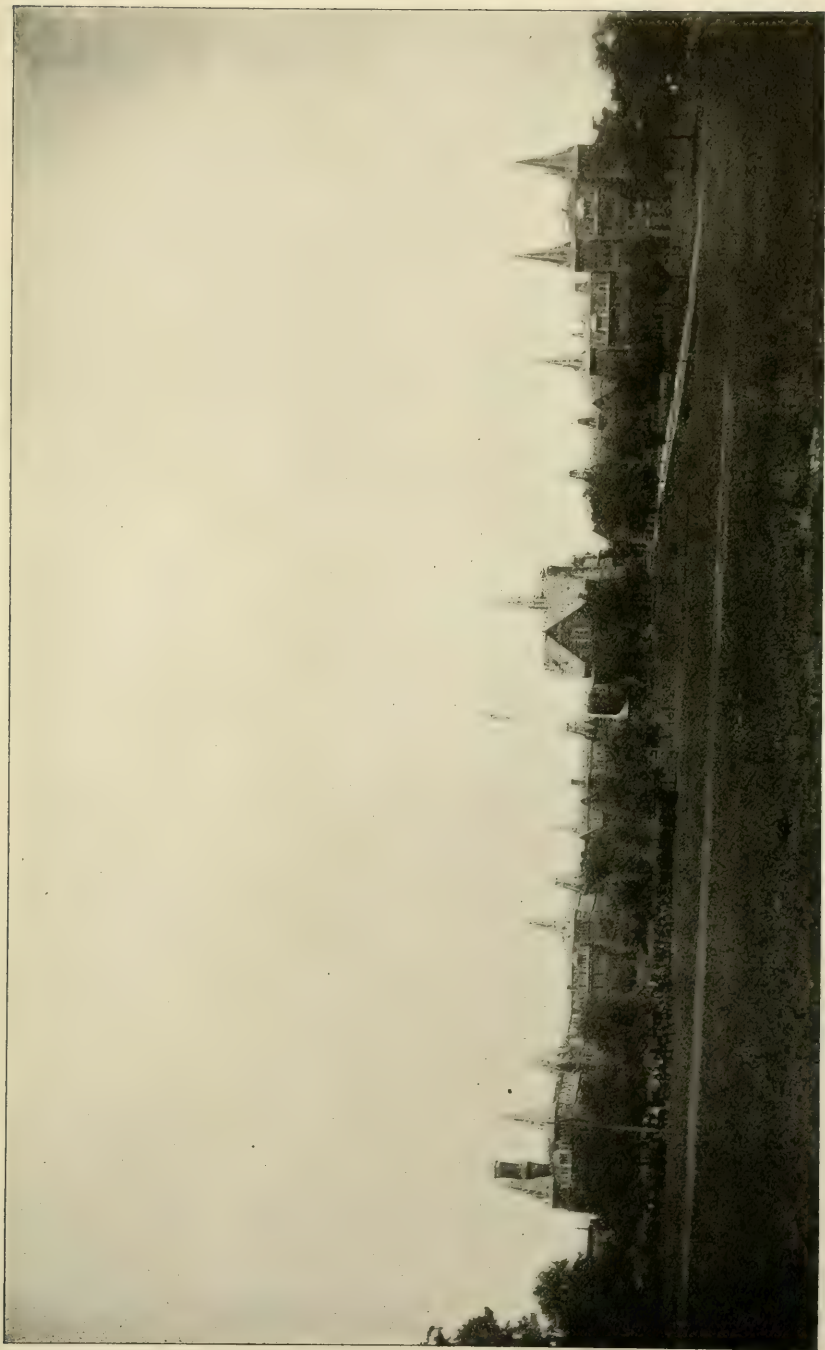
Cap—Regulation naval pattern; gold badge; State coat of arms in front; black cord; gilt buttons.

I beg to report for such action as your board may consider proper that the firm of Parrish, Phillips & Co. is in default in the matter of deliveries of coal under their contract with the hospitals for one year from July 1, 1900. It was intended in making this contract to have the coal delivered as rapidly as possible, so that the unloading and carting to the several boiler houses might be done before the coming of bad weather, and consequently of bad roads, with the fall and winter season. The deliveries by this firm, following the execution of the contract, were dilatory and unsatisfactory, and ceased altogether with the sending of a barge of coal upon August 18th. Two days prior to the discharge of the coal from that barge—on August 29th—a telephone message was sent to the firm asking them to send another barge, and this was followed by a letter to the same effect under date of August 31st. In answer to these requests promise was made on September 5th that a barge of coal should be sent to the hospital "in a day or two." This barge has not yet arrived, and no coal has been received since the date given. The firm notified the secretary of your board, under date of September 17th, that no further deliveries would be made under this contract because a bill under a former agreement had not yet been paid.

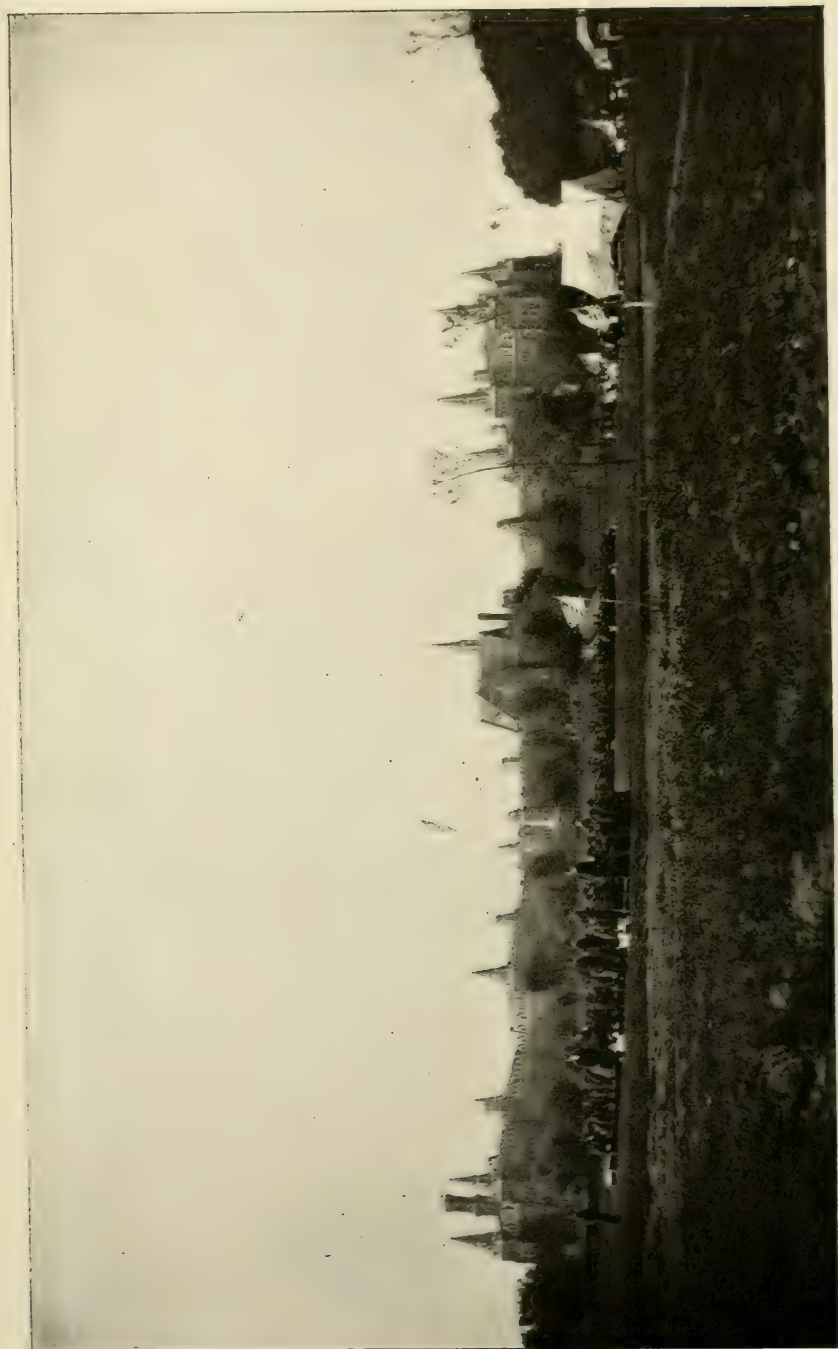
Fortunately, at the time of the execution of the contract with Messrs. Parrish, Phillips & Co., there was on hand at this hospital a quantity of coal unloaded during the spring months ag-



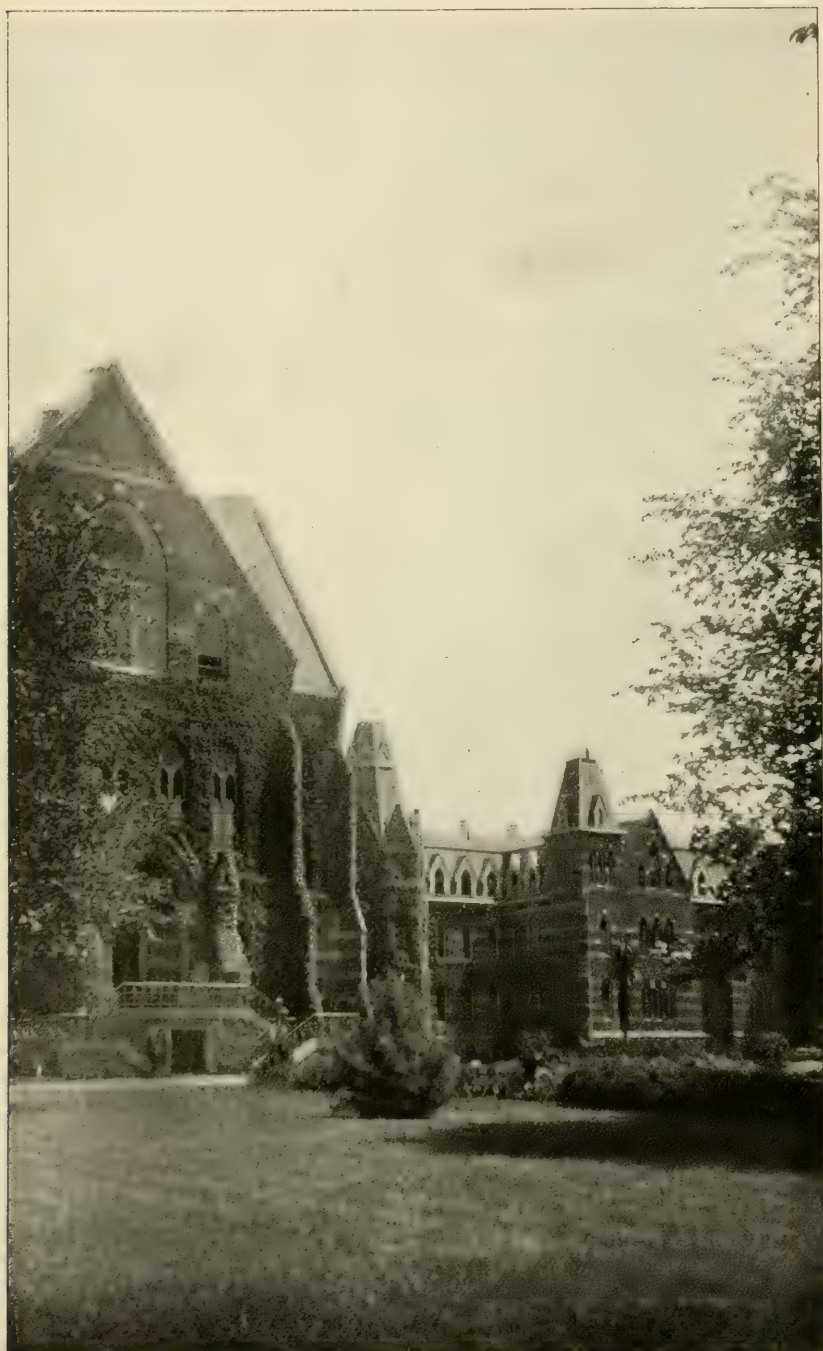
MANHATTAN STATE HOSPITAL—EAST.—MAIN BUILDING—FRONT ENTRANCE.



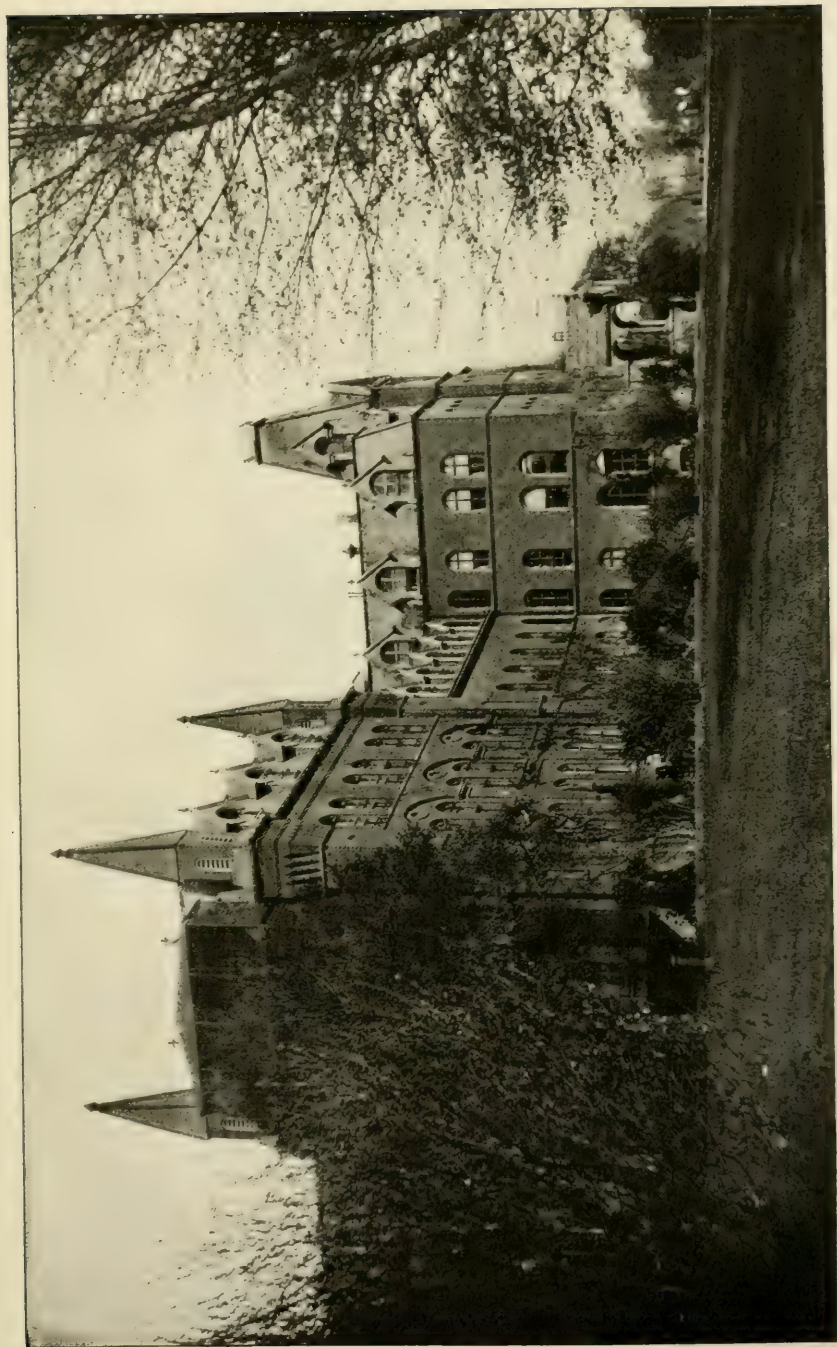
MANHATTAN STATE HOSPITAL—EAST.—MAIN BUILDING.



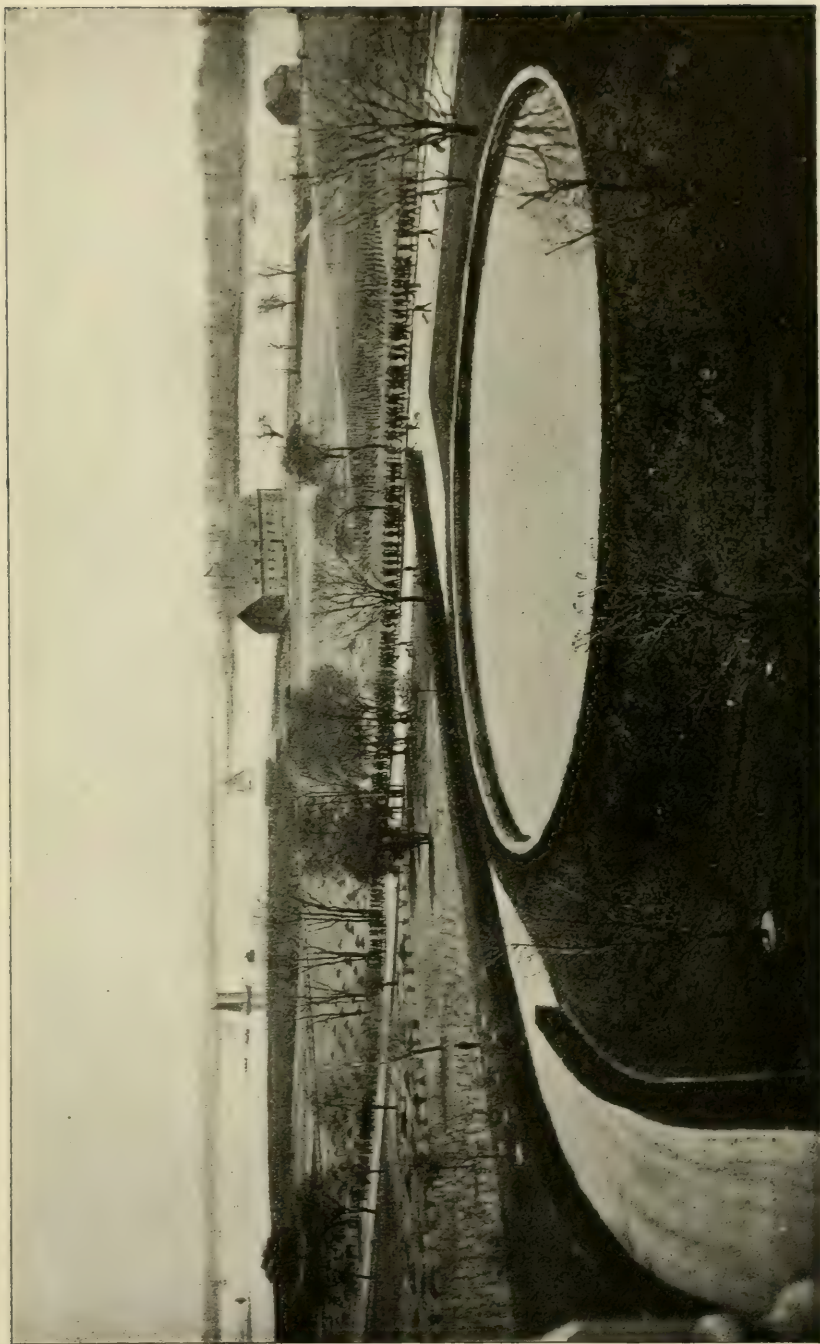
MANHATTAN STATE HOSPITAL—EAST.—FOURTH OF JULY CELEBRATION.



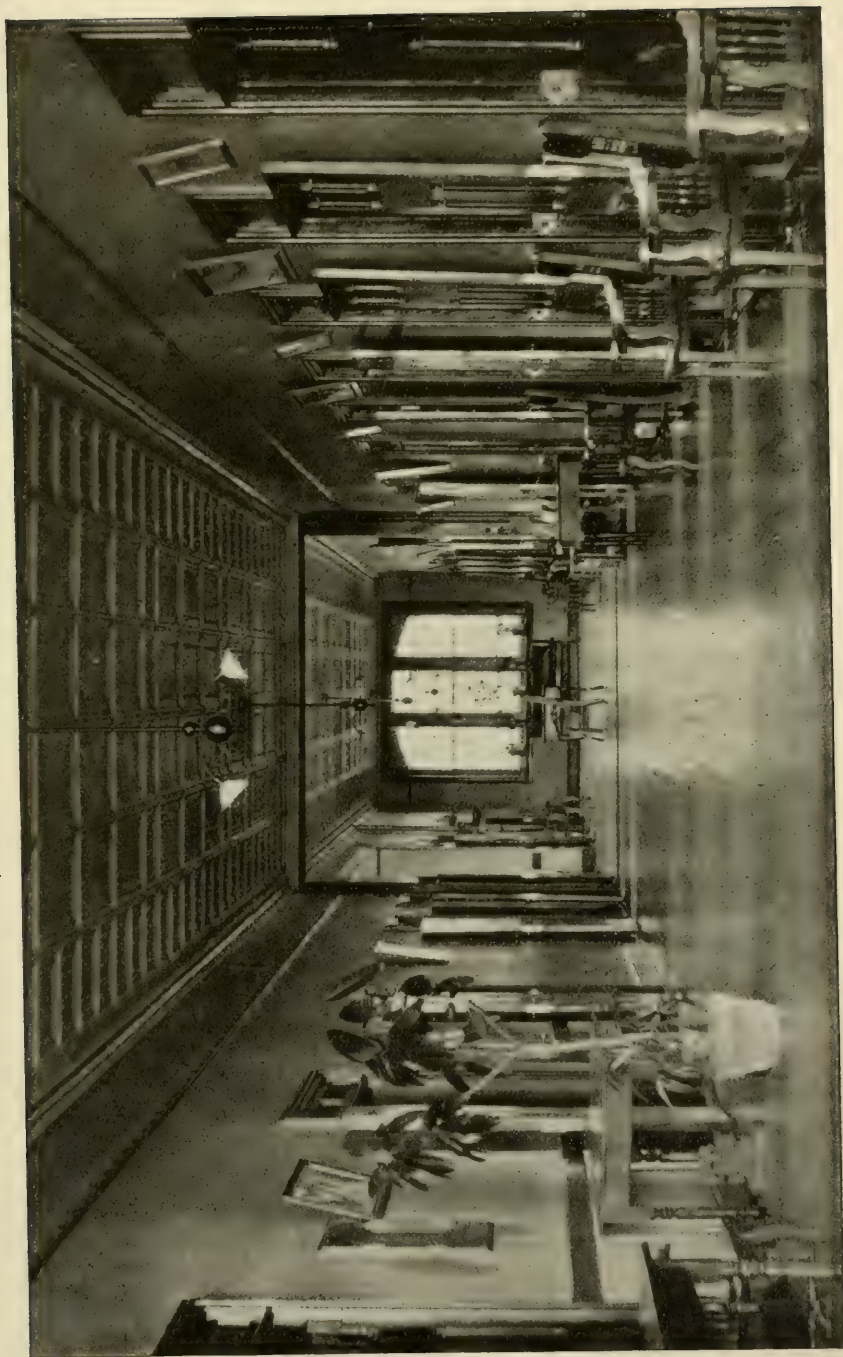
MANHATTAN STATE HOSPITAL—EAST.—MAIN BUILDING—REAR ENTRANCE.



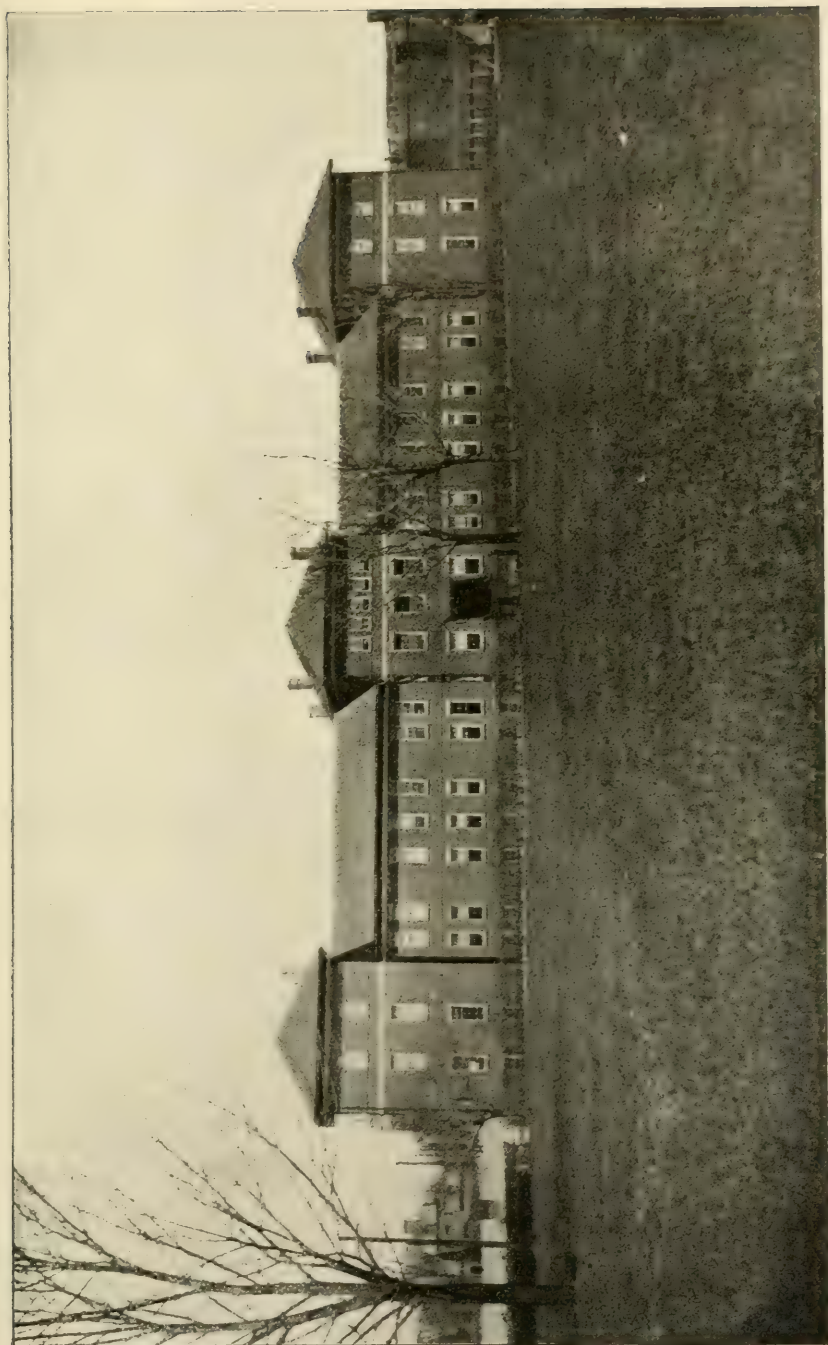
MANHATTAN STATE HOSPITAL—EAST.—EAST BUILDING.



MANHATTAN STATE HOSPITAL—EAST.—VIEW FROM MAIN BUILDING HOSPITAL FARM, LONG ISLAND—LONG ISLAND SOUND.



MANHATTAN STATE HOSPITAL—EAST.—INTERIOR OF A CONVALESCENT WARD.



MANHATTAN STATE HOSPITAL—EAST.—NURSES' HOME.

gregating 1,001 tons. This quantity, with that since received from Messrs. Parrish, Phillips & Co., making a total of 2,447 tons, is estimated to be sufficient to supply the hospital's needs, with average weather, until about the middle of December.

Yours, respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, November 14, 1900

Hon. HENRY E. HOWLAND, *President, etc.*

My Dear Sir—The standard monthly reports required by the rules of your board have been prepared and placed upon file in your office, covering the month ending October 31, 1900.

The hospital was visited by Commissioners Wise and Osborn on October 30th, with the special view of considering the repairs, improvements, etc., proposed to be made during the current state year. Their attention was particularly called, in the matter of the general administration of the hospital, to the necessity for extensive repairs to the several piers, the main pier on Ward's Island especially requiring immediate attention. In the matter of needed repairs and improvements at the Manhattan State Hospital, East, in particular, prominence was given to the necessity of the erection of a new kitchen, a matter which has from time to time occupied the attention of your board, but the recommendation for the building of which has not as yet been favorably acted upon by the Commission. While no formal action was taken, it was intimated by Commissioner Osborn that if the State Architect would prepare plans which should meet the approval of your board and of the Commission favorable action might be expected. I accordingly at once arranged with Mr. Heins to draw the necessary plans, and they are now in the course of active preparation, following a visit to the hospital and inspection and consultation by Mr. Heins.

Another matter which was similarly treated by the Commission was that of the required changes in the old system of

plumbing in the wards of the hospital which have not already been renovated and renewed. Estimates were submitted for this work a year since, but the Commission was under the impression that the cost of the proposed renewals was excessive, and have now agreed that the State Architect and myself shall prepare a new plan for one hospital section, comprising three wards, which, if satisfactory to them, will then be adopted as a standard and the renewals of the plumbing in the remaining sections proceeded with from time to time upon the same plan.

A number of other matters received informal attention and will be acted upon formally from time to time as estimates are prepared based upon proposals which are now being invited. Some minor repairs and improvements were acted upon by the Commissioners at the time of their visit, and are now being attended to upon estimates duly approved. These comprise several matters of painting, carpenter work, etc., in the various wards and other portions of the buildings.

Since my last formal report to your board upon the occasion of your regular monthly meeting on October 10th but one barge of coal (247 tons) has been delivered by the contractors, Messrs. Parrish, Phillips & Co. Notice has been sent to them to continue delivery, but has not been complied with. Of the amount assigned under the contract to this hospital (12,000 tons) but 1,481 tons have been delivered to this date, including the barge just referred to. While as before reported the hospital was fortunate in having considerable stock on hand at the time of the award of the present contract, and while with the average weather to be expected at this season of the year it is hoped that that supply will last until about December 20th, it is of great importance that deliveries should be made so that the carting from the dock to the boiler house can be done while the weather is favorable and the roads are in good condition. A barge delivered a month hence will probably cost much more in the expenditure of labor, etc., to deliver at the boiler houses than one received now.

So far as I am informed no action has been taken in regard to the several complaints as to the condensed milk delivered under the existing contract by the McDermott-Bunger Dairy Co. Apart from the quality of the milk, we have had reason to complain of the cans in which it was sent here being old, dilapidated, rusty and uncleanly. After warning to the contractors, I took occasion to reject the delivery of November 12th upon the grounds stated, and the contractors accepted my action and replaced the milk rejected, and have since corrected the conditions complained of.

An apparatus, as before reported, has been estimated for and allowed by the Commission, but has not yet been purchased. As soon as it is supplied and installed, more frequent examinations of the milk and more prompt detection of deficiency can be expected.

Upon the occasion of the election on the 6th inst., the inconvenience in the matter of giving opportunity to the officers and employees of the hospital to vote, already from time to time reported to your board, was repeated. The polling place is still located at a distance of nearly three-quarters of a mile from the hospital pier, on First avenue, between One Hundred and Fifth and One Hundred and Sixth streets. It is a matter of grave difficulty, and even of danger, to care for and control the patients upon that day each year, while at the same time allowing a sufficient number of the employees to be absent at a given time to enable them all to vote within the prescribed hours. Many of them also have residences, so far as the purpose of voting is concerned, at still more remote distances from the hospital, which adds to the difficulty named. The same trouble, though of course in a minor degree, exists in the matter of affording opportunity for registration upon the registering days preceding election. I would respectfully ask the board to take some formal steps toward remedying the matter complained of, as if taken now they may have some favorable results, whereas if left to the time immediately preceding another election, it will be claimed, as has before been claimed, that it is too late to

make any change. Apart from the distance from the hospital pier to the polling place, there is of course to be added the distance to be traversed upon the island, and several other polling places much nearer to the One Hundred and Sixteenth street pier have to be passed by the voters of the island who are compelled to go to One Hundred and Sixth street.

I append for the information of your board a copy of the notes entered by Commissioners Wise and Osborn upon the official visiting book upon the occasion of their visit on October 30th.

The medical staff of the hospital, in accordance with the requirements of your board, commenced to wear the prescribed uniform from the 1st instant.

Yours, respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, *December 12, 1900*

Hon. HENRY E. HOWLAND, *President, etc.*

My Dear Sir—The regular monthly tables called for by the rules of your board are upon file in your office, and I beg to add to the information contained in them a few details as to matters arising since your last meeting on November 14th.

The matter of principal moment pending at the date of your last meeting was the proposed erection of a new kitchen to take the place of the old one located in the basement of the main building, and which for years had been complained of as unwholesome and objectionable from every point of view. At the date of your last meeting the matter rested with the State Commission to decide as between the proposition to erect a new kitchen and that to make certain changes in the old from which better ventilation and alleviation of some of the principal objections were expected. At that time one of the State Commissioners favored the first proposition and one the second. It being left to the third Commissioner (Commissioner Parkhurst) to decide as between the merits of the two propositions, he

visited the hospital on November 24th, and subsequently gave his decision in favor of the erection of the new kitchen. The matter has therefore been formally placed in the hands of the State Architect, who is engaged in the preparation of detailed plans, a rough preliminary plan having been agreed upon in conference between the State Commission, the State Architect and myself, in which I acted under authority from the committee appointed by your board to consider the subject and represent the board in the matter.

The matter of repairs and alterations to the several piers at Ward's Island has reached a stage when the State Commission has authorized the employment of an engineer to prepare plans and specifications and superintend the work upon these piers, and the Commission has agreed to make the necessary repairs at the passenger dock and the necessary alterations at the storehouse dock which will put it in condition to be used by the steamers while the other dock is in the hands of the contractors.

The absence of Drs. Dent and Smith upon their vacation will make necessary the deferring of a report upon the matter of the division of accounts for general expenditures between the different sections of the hospital. In the meantime, I have looked further into the matter, and as a preliminary report beg to say that I find the present system to work irregularly and unsatisfactorily in that one or other of the hospitals will in the end pay, under present arrangements, a larger proportion than the other two, and that any comparison of per capita cost, either between the different sections of the hospital or between the different periods in the history of any one section, will be impossible to be made with any accuracy or satisfaction. In the current period, for example, the Manhattan State Hospital, East, assuming for four months the entire payment of general administration expenditures, finds itself in the position of paying for two quarters out of the fiscal year the rent of the telephone at Central Islip from which it derives no benefit, the Central Islip Hospital, which derives the sole benefit, paying under the present arrangement for but one quarter out of the

four. Similarly, under the present arrangement in regard to division of payment, the expenses of the purchasing steward's office fall, in my judgment, unduly upon the Manhattan State Hospital. In the matter of telephone charges, again, for example, while the Manhattan State Hospital pays all the cost of its own telephone, it is called upon to pay, through the purchasing steward's office, three-fifths of the cost of what are called by the telephone company "foreign" messages, almost all of which are sent to the Long Island State Hospital at Kings Park or at Flatbush. I have called the attention of the purchasing steward to this matter, and understand him to agree with me that this is not a proper distribution of these charges, and I assume that he will join in any recommendation to change the process. I would ask that this matter may be also referred to the three superintendents of your hospitals, so that it may be taken up with the matters already referred upon the return of Drs. Dent and Smith.

Since the date of your last meeting the contractors for the delivery of coal, Messrs. Parrish, Phillips & Co., have sent two barges to the Hospital, East, the contents of which, together with that then reported as on hand, bring the total quantity available up to a point where we can expect, with average weather, to have enough to last until about the 3d of January. The stove and grate coal, which are not the subject of contract but are purchased from estimate period to estimate period, are now on hand in sufficient quantity to last until about the 25th of the current month. The total amount of coal received at this hospital on the contract with Messrs. Parrish, Phillips & Co., up to the present date, is 2,025 tons, the total amount contracted for being 12,000 tons; the delivery therefore is by no means in sufficient proportions.

Under the assignment made by your board at your last meeting I attended as a delegate the Conference of Charities and Correction, held in Albany on November 20th and the following days, and took part in the proceedings as representing your hospital.

I beg to call the attention of your board to the fact that two regular contracts will expire with the end of the current month—one with the New York Telephone Company, for the service between the city office of the hospital and Ward's and Blackwell's islands, and one with the McDermott-Bunger Dairy Company, for the supply of milk to the several departments of the hospital. I would respectfully ask your board to take such steps as you may deem proper toward the letting of new contracts for the services named under the changed conditions which will exist, at least in the matter of the telephone contract. Apart from other considerations, the fact that the law requires the abandonment of the buildings still occupied by the hospital on Blackwell's Island upon the 1st of March, and the expectation that such abandonment will be accomplished, if not at that exact date somewhat later in the year, would seem to require the reframing of the contract.

Yours, respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, *January 9, 1901*

Hon. HENRY E. HOWLAND, *President, etc.*

My Dear Sir—I have the honor to submit the customary report as to the Manhattan State Hospital, East, for the period elapsing since your last regular meeting on December 12th. The details as to movements of population, employment of patients, etc., have been compiled, and the regular tables placed upon file in the office of your board.

The furnishing of meats of all kinds—fresh, corned, smoked, etc.—under the contract entered into with the firm of Schwarzschild & Sulzberger Company, for six months from October 1, 1900, has been attended recently by irregularities which have led to several rejections upon the ground of failure to meet the specifications in the matter of quality, weight, etc. Apart from the irregularities attending particular deliveries on given dates, there has been the general irregularity of delivery at the hos-

pital pier, foot of East One Hundred and Sixteenth street, instead of at the storehouse pier at Ward's Island. In defence of their action in this matter the contractors claim that the specification calling for delivery in carload lots is to be taken literally, and inasmuch as the orders for a week's supply for the two branches of the hospital on Ward's Island do not amount to the full capacity of a car, they are not bound to make such delivery. They claim also that the purchasing steward has sanctioned the delivery at the hospital pier instead of in the specified way. After submission to the chairman of the finance committee and to the secretary of your board, the question has been discussed between Dr. Dent, who drew the specification, the purchasing steward, the representative of the contractors and myself. As a result of such discussion the whole question is submitted to your board in order that the serious step of waiving or altering a specification of a contract, after the contract has been formally entered into, may be acted upon in a regular and proper manner instead of the specification being ignored without formal action. In case your board should determine to excuse the contractors from the delivery intended to be secured by their contract, and authorize them to deliver at One Hundred and Sixteenth street, as is now being done, I would suggest that definite times of delivery be insisted upon. At present the deliveries are made at the contractors' convenience and without regard to the interests of the hospital, and are occasionally so late in the day as to render it inconvenient to transport the meats to the island, and to make it too late to secure effective rejection and replacement in case of unsatisfactory deliveries.

The usual observation of the Christmas holidays was made in the furnishing of a special dinner and of entertainments, participated in by patients and employees, and supplemented by the services of the hospital band.

Yours, respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, *February 13, 1901.*

Hon. HENRY E. HOWLAND, *President, etc.*

My Dear Sir—The reports of the Manhattan State Hospital, East, for the month ending January 31st have been placed upon file in the office of your board.

The plans and specifications for the building of the new kitchen at this hospital have been completed and approved, both by your board and by the State Commission in Lunacy, and the usual advertisements have been inserted calling for the presentation of proposals upon Wednesday afternoon, the 27th instant, at 4.30 o'clock.

The delivery of coal under the existing contract is still being made with the delays heretofore complained of. On the whole, however, there are on hand 798 tons of No. 1 buckwheat coal, which we anticipate will last until the 26th instant. In addition to this there have been delivered 500 tons of No. 2 buckwheat coal, which is being held in reserve for use in case the supply of No. 1 should be exhausted. No No. 2 buckwheat coal has as yet been used at this hospital, and it is doubted, especially in view of the experience of the other branches of the Manhattan State Hospital, whether it can be utilized, at least with the present arrangements in the boiler house, to advantage. If unexpectedly severe weather should prevent the delivery of a sufficient quantity of the No. 1 buckwheat coal contracted for, an effort will be made to use the No. 2, and probably by admixture with coal of a better grade the emergency, if it occurs, can be tided over. In the matter of stove coal, which is purchased in the open market and is not the subject of contract, the deliveries have been more prompt and satisfactory, and there are now on hand 234 tons, which it is anticipated will last until about April 1st. Of the No. 1 buckwheat coal contracted for, the total being 12,000 tons, only 3,180 tons have been delivered up to this date.

At the request of the secretary of your board I have prepared some brief notes as to the numbers of the attendants and employees generally of this hospital, and of their proportion to the

number of patients under care. These figures are subjoined, and are intended for the information of your board in connection with the proposed reduction on the part of the Legislature of the State of the allowances for the payment of wages of employees. Should the threatened reduction be carried into effect, it will become necessary either to materially reduce the force of employees or to considerably reduce the wages of individuals, this reduction following too upon one made less than two years ago. As your board is fully aware, and as the figures will serve to show, the relative number of employees, and especially of attendants in actual care of the patients upon their wards, etc., is by no means excessive, and any reduction in the proportionate number must mean a much reduced standard of care and treatment. Apparently the intention of the legislative authorities rests upon a mistaken understanding of the facts in the matter, it evidently being believed by them that all employees are engaged in the actual care of the patients, thus making a proportion of approximately 1 to 5. As a matter of fact, the proportion, when only attendants on ward duty and in the direct service of the patients are counted, and making due allowances for absences, unfilled vacancies, sickness, etc., is but about 1 to 12. It will further be remembered by your board, and it is hoped that it will enter into any consideration and action that may be taken by the authorities, that this particular hospital, as indeed its fellows of the Manhattan State Hospital system, has been less generously treated than other hospitals throughout the State, the annual tables submitted to the Legislature by the State Commission in Lunacy during the four years of the amalgamation of the Manhattan State Hospital with those already in the State system showing that it has been the lowest in point of per capita expenditure in the matter of salaries and wages, as indeed in almost all the different divisions of expenditure, as shown in those tables. The figures are as follows:

February 1, 1901

Number of patients.....	1,904
Number of employees.....	339
Ratio of employees to patients.....	1 to 5.61
Ratio of attendants assigned to day duty to patients	1 to 10.94
Ratio of attendants assigned to night duty to patients	1 to 50
Number of attendants assigned to day duty in wards	172
Average number of unfilled vacancies.....	1
Daily average number of attendants on pass.....	12
Daily average number of attendants off duty through illness, etc.....	4
Daily average number of attendants actually on duty	155
Ratio of attendants to patients.....	1 to 12

Yours, respectfully

A. E. MACDONALD

*Superintendent*NEW YORK CITY, *March 13, 1901*Hon. HENRY E. HOWLAND, *President, etc.*

My Dear Sir.—The regular reports for this hospital for the month of February have been placed upon file in the office of your board, and in addition to the information contained therein there is but little to be noted as of importance occurring since the last regular meeting of your board on February 13th.

Since my last report to your board of the quantity of coal on hand, on the 13th day of February, three barges of No. 1 buck-wheat coal have been received and unloaded, and one barge is now at the coal dock in course of being discharged. With the contents of the last named barge added to that already in stock, we have on hand at this date 667 tons, which we expect will last until the 27th instant. We have also on the island 500 tons of

No. 2 buckwheat coal which is being held in reserve for use if for any reason the supply of No. 1 buckwheat coal required by the contract should become exhausted without being replaced. As previously reported to your board, the No. 2 buckwheat coal is not suitable for burning in the boilers of the hospital as at present fitted, and was supplied by the contractors with the understanding that it should be regarded as a reserve only. It is hoped now that with the advancing spring the supply of No. 1 buckwheat coal will be sufficient to provide for the hospital's wants without the use of the No. 2. It will then be for your board to determine what disposition shall be made of the latter, whether it shall be burned through the summer in conjunction with the No. 1; turned over to the West Hospital, where the boiler conditions are more favorable, or returned to the contractors. Of the total amount of 12,000 tons called for for this hospital under contract and to be delivered within the year commencing July 1, 1900, 4,309 tons have now been received, including the quantity now reported as on hand.

The contract under which the steamboat service of the hospital is being carried out will expire on June 15th. I would respectfully ask your board to provide for an investigation of the matter with a view to the renewal of this or a similar contract, or to make some arrangement for the performance of the service following the date named. In this connection also I would call the board's attention to the insecure condition of the main dock at Ward's Island, owing to the want in time of necessary repairs. The matter has been from time to time considered but no action has been taken, and the dock is in such condition now as to be, in the opinion of the engineer who was engaged to examine it, beyond the possibility of proper repair. He therefore recommends the extension of the present freight dock and the abandonment of the main passenger dock.

The proposals for the erection of the new kitchen at this hospital were opened pursuant to advertisement on Wednesday, February 27th, at the city office of the hospital by the secretary of your board, Mr. Dodge. The total of the lowest proposals

in each case for the building, steamfitting, plumbing and electric wiring, was but \$15,571.28, being well within the amount of the allotment made by the State Commission—\$18,500. In view of this result of the proposals the Commission has determined to place a second story upon the portion of the new kitchen building containing the dining-room for employees in order that accommodation may be provided there for dining-rooms for subordinate officers, clerks, etc., and in this way the dining-rooms at present assigned to such employees in the main building may be dispensed with. The tabulated statement of proposals was forwarded to the chairman of your finance committee for action by that committee under the resolution of your board, and copies were also forwarded to the State Commission in Lunacy and the State Architect.

Yours, respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, April 10, 1901

HON. HENRY E. HOWLAND, *President, etc.*

My Dear Sir—In addition to the information contained in the regular monthly reports which have been placed upon file in the office of your board, I beg to submit the following notes as to the progress of the Manhattan State Hospital, East, during the period since March 13th, the last regular meeting.

As instructed by your board, I submitted upon the occasion of the bi-monthly conference of superintendents of State hospitals with the State Commission in Lunacy, in Albany on March 26th, the matter of the proposed new contract for telephone service. In accordance with the resolution of your board I informed the Commission that the proposition of the telephone company known as No. 3 would be acceptable, provided such independent connections were established between the offices of the Manhattan State Hospitals, East and West, respectively, and between Ward's Island and the hospital pier at the foot of East One Hundred and Sixteenth street as would improve,

or at least preserve, the present means of communication. In the interval between the last meeting of your board and the conference referred to it had been discovered that the cost of these independent connections had been underestimated. In view of this fact, and of the belief of the Commission that a better arrangement might possibly be made with the telephone company by which it would assume the cost of the independent connections and include the service in the contract, action was deferred and further correspondence with the telephone company initiated.

As instructed by your board under a resolution passed at your last meeting, I have conferred with the State Architect as to the conditions under which the excavation for the new kitchen building might be made by labor supplied by the hospital, and the amount of the cost of such excavation thereby saved to the hospital and the State. An agreement has been reached by which this work has been assigned by the contractor to the hospital under an allowance by the former of \$271.50. In the expectation that the work under the contract would be commenced without delay, the ground has been fenced off, the site of the building staked out by the architect's assistant and the labor of excavating commenced. It was afterwards found, however, that the contracts had not been prepared and signed as expected immediately after the award by your board, and the State Architect explains that recent legal decisions as to the effect of statutes regulating the hours of labor, etc., had raised a doubt pending the settlement of which by the Attorney-General the execution of the contracts had been deferred. The contractor has visited the island and satisfactory arrangements have been made with him, not only as to the matter of the excavation, but as to the use of the hospital docks for the landing of materials for the building referred to. In the latter respect the contractor has agreed to accept the use of what is known as the "East" dock for his exclusive purposes, thereby leaving the other docks for hospital purposes alone, an agreement which is extremely important in view of the bad condi-

tion as to repair of the principal one of the docks last named, which condition has already been reported to and the matter acted upon by your board.

In accordance with the resolution of your board the superintendents of the three divisions of the hospital prepared specifications and advertised for proposals for the supply of fresh and salt meats for the period of six months from the 1st instant. The proposals were opened as advertised on the 29th ultimo, and their tabulation submitted to the finance committee, which in turn awarded for your board the contracts to the lowest bidders, Messrs. Schwarzschild & Sulzberger Co., at a total estimated cost of \$39,015 for fresh meats, and Messrs. Nelson Morris & Co., at a total estimated cost of \$8,213.40 for salt meats. Deliveries under these contracts were commenced as required on the first of the current month.

The delays upon the part of the contractors in delivering coal for use at the hospital have continued throughout the period elapsing since the last meeting of your board. On March 8th notice was sent to the contractors to provide a barge of coal on the 12th, but the barge did not arrive until the evening of the 19th. Notice was again sent on March 21st that the hospital would be ready to receive a barge on the 25th, but that barge did not arrive until the evening of April 3d. Altogether but one barge has been both received and unloaded since the date of my last report, March 13th. The unloading of a barge that was at the dock at that date and partially discharged has been completed, and another barge received on April 3d will probably be unloaded by this evening. Notice has been sent (on the 5th inst.) that the hospital would be ready for another barge on the 8th inst., but the barge has not yet arrived, and no explanation has yet been given of the delay, in answer to a telephone message sent this morning.

In all there have been received 5,300 tons of buckwheat coal under the contract calling for 12,000 tons during the period which ends June 30th. It is estimated that the quantity now on hand (481 tons of No. 1 buckwheat coal and 501 tons of No. 2 buck-

wheat coal) will be sufficient to supply the needs of the hospital until about June 30th. The hospital is therefore practically assured that there will be no danger of the supply being exhausted prior to the execution of a new contract from July 1st, or to such arrangements, if they are made, as will secure the carrying on of deliveries beyond the precise term of the present contract until 12,000 tons in all shall have been delivered. I would suggest that, in view of the fact that the failure to live up to the contract has been entirely upon the part of the contractors, such formal agreement should be secured from them before the expiration of the time originally named and the possible lapse of the contract in consequence.

The lectures of the training schools for nurses in this and the other branches of the Manhattan State Hospitals will terminate on or about April 29th, and the examination by the committee of State hospital superintendents will follow on or about May 10th. Leaving sufficient time for the examination of papers of the candidates for graduation and the decision by the committee as to the successful candidates, the commencement day might be set with advantage for the week commencing May 20th. I would recommend that as in former years a committee of the board of managers be appointed to set the time for the holding of the annual commencement exercises, and to make the other usual arrangements as to addresses and other details.

The bowling alley which has been in course of construction for the past few months at the East Hospital has been completed and put in use in the period since your last meeting. The patients of the several services, especially the convalescents and the working patients, use it in relays on the afternoons of each week day, and it has already proven itself to be a very valuable addition to the means of recreation, and consequently of improving the mental and physical condition of patients of all classes.

Yours, respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, May 8, 1901

Hon. HENRY E. HOWLAND, *President, etc.*

My Dear Sir—The regular monthly reports for the month of April have been placed upon file in the office of your board.

Proposals for the installation of a line of plumbing in a section of three wards were opened on Wednesday, May 1st, in the presence of Mr. Seligman of the finance committee, and the proposals were considered by that committee upon the following day. The lowest bidder (Augustus E. Gent) was awarded the contract at the total price of \$2,700.

The excavation for the new kitchen has been completed for some time, but the contractor has not yet commenced work upon the building, although some of his material has been delivered at the island within the past few days.

Since the last meeting of your board, on April 10th, 537 tons of No. 1 buckwheat coal have been received under contract with Messrs. Parrish, Phillips & Co., making a total of 5,837 tons of all kinds furnished under that contract. Under the agreement made in consequence of the action of your board at its last meeting, there will remain to be delivered 6,163 tons, which should provide the hospital under ordinary circumstances up to about May 1, 1902. The making of a new contract therefore will not be necessary, so far as this hospital is concerned, at the date of the termination of the present one, July 1st, and in view of the project to erect a hoisting apparatus and trolley or other system of delivery to the main boiler houses of the two hospitals, it will be desirable that a new contract shall not be made until that system is installed, as the conditions under which delivery will be made will be so materially altered.

The furnishing of patients by this hospital for the clinical instruction of medical students in the several colleges of the city has been completed during the past month for the current collegiate year. During the year patients have been furnished for the clinic of Prof. Carlos F. MacDonald, at the University and Bellevue Hospital Medical College; for Dr. Frederick Peter-

son, chief of clinic to Prof. Starr at the College of Physicians and Surgeons, at the respective colleges named. The clinic of Prof. Allan McLane Hamilton, of the Cornell University Medical College, has been held at the hospital building by Dr. William Hirsch, clinical assistant.

The State Architect, Mr. Heins, visited the hospital this morning and requested me to obtain from your board approval of the addition to the new kitchen building of a conduit connecting it with the main building for the passage of stores to the kitchen and of food from the kitchen for ward 12 in the main (central) building. The estimated cost is from \$1,500 to \$2,000, and the informal sanction of the State Commission has already been given.

Very respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, *June 5, 1901*

HON. HENRY E. HOWLAND, *President, etc.*

My Dear Sir—I have the honor to submit the regular monthly report of the Manhattan State Hospital, East, for the month of May, 1901, supplementing the usual tables, which have been placed upon file in the office of the board of managers.

The isolation of cases of tuberculosis has of late received considerable attention, and has been carried out more or less fully in the State hospitals for the insane as well as in general hospitals. In this particular hospital the isolation of this class of patients has been attended with difficulty, owing to the fact that the patients are provided for only in two large buildings, and although a portion of a ward has been set apart and isolated as far as practicable, no such separation as is considered proper and efficient has been possible. In this emergency I have established an experimental camp for tuberculosis cases where they can be isolated, at least during the summer, in tents upon the hospital grounds. The camp has been erected, consisting of one large tent capable of containing from twenty to twenty-five

patients, with annexed tents of different sizes for the use of the physicians, the attendant nurses, for pantries, etc. The patients were placed in the larger tent and the camp opened this morning. In this way four months at least of such treatment can be secured, and by that time it can be determined whether the success of the experiment justifies the construction of more permanent buildings for a similar purpose. It is quite possible also that it may be found with reinforcements and additions the tents themselves can be kept in use into or perhaps throughout the winter.

At the conference between the representatives of the State hospitals and the State Commission in Lunacy, held in the latter end of the month of March, Commissioner Osborn stated that it was intended, provided a law prepared by the Commission was passed and received the approval of the Governor, to ask from the board of managers the adoption of a by-law extending the collection of reimbursement for the maintenance of patients to an additional class. The by-law as proposed reads as follows, and at the request of the State Commission, under date of the 3d inst., I beg to bring it before your board and ask that it be adopted:

“There shall be charged and become due from every insane person admitted to the State hospital, for care and maintenance, and who is not admitted under a special agreement, the sum of \$3.50 per week, or such other sum as may from time to time be fixed as a general reimbursing rate by the State Commission in Lunacy. Such sum shall be a charge to and due by the persons liable by law for the support of such insane person or by the committee of such insane person, and shall be a charge upon the estate of such insane person whenever the same shall vest, or be reduced to possession, by or on behalf of such insane person. It shall not be necessary to make an entry of such charge upon the books of the hospital unless such entry is specially directed by the board of managers.”

The present position of the contract for buckwheat coal is as follows: Under the contract 12,000 tons were to be delivered by

the contractor in the period ending June 30th of this year. The contractors have, however, agreed, in view of delays in their shipments, to waive the condition as to the termination of the contract and to continue such deliveries until the entire 12,000 tons shall have been furnished. On May 30th 6,483 tons of the 12,000 had been delivered at the hospital, of which 5,167 have been consumed, leaving in stock for future consumption 1,316 tons, with a balance of 5,517 tons still to be furnished under the contract. It is estimated that this quantity of coal will supply the needs of the hospital until about May 1, 1902.

Owing to the inclemency of the weather it was found impossible to carry out the arrangements made for the usual celebration of Arbor day on May 3d. As the weather continued inclement, trees which had been procured for the purpose were planted without formal ceremony, and the games projected were postponed and amalgamated with those of Memorial day. In the case of the latter celebration also the weather interfered, and it was necessary to postpone it until the following Saturday, the 1st instant, when the usual games, etc., were given with great success. Eighteen hundred of the patients of this hospital attended, with 150 from the Manhattan State Hospital, West, and about 200 visitors who happened to be upon the island visiting their relatives in the hospital.

Very respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, *July 10, 1901*

HON. HENRY E. HOWLAND, *President, etc.*

My Dear Sir.—I beg to submit the regular monthly report of the Manhattan State Hospital, East, for the period elapsing since the last regular meeting of your board on June 5th. The standard statistical tables for the month of June have been filed in the office of the board.

Formal report was made to the secretary of your board, and the other members doubtless learned through the newspapers of

the holding of an inquest by a jury, under Coroner Zucca, in the case of the patient Herbert C. Wadman, who died in the Manhattan State Hospital, East, on the morning of March 5th, having been an inmate for some two and a half days prior to that time. The coroner's jury returned a verdict censuring the hospital for the patient's death, specifically consuring Dr. L. C. Pettit, second assistant physician, who had the patient in charge, stating that the death was probably hastened by injuries, and naming two of the hospital employees—Michael Carroll, charge nurse, and John Foley, night attendant—as probably cognizant of the infliction of the injuries. The two employees named were held by the coroner for the grand jury, under \$2,000 bail each, for which bonds have been furnished and the employees have returned to duty.

At the time of the examination at Bellevue Hospital by Dr. Wright of this hospital staff, prior to the transfer of the patient, certain external injuries were discovered and recorded, the physician in charge of the pavilion at Bellevue signing the blank in conjunction with Dr. Wright. Immediately following the patient's arrival at the hospital, and in the course of the more complete examination then made, one broken rib was discovered and immediately recorded. The patient was in a very reduced physical condition, through exhaustion from extreme maniacal excitement following prolonged dissipation, and was suffering also from chronic diseases.

Following the patient's death, his wife and other relatives visited the hospital and informed the physicians that they knew that the patient had been injured at Bellevue Hospital, that they proposed to bring suit against the authorities thereof and invited co-operation upon the part of the officers of this hospital in prosecuting their claim. When this request was declined, a similar one appears to have been made at Bellevue Hospital, and apparently with greater success.

In the course of the inquest, which was attended by Mr. George C. Austin, as representing the Commission and the hospital, a determined effort was made in behalf of the friends of

the patient, and by the deputy district attorney assigned to the case, to direct the evidence against the Manhattan State Hospital, and to suppress or belittle the evidence which was offered as to the occurrences at Bellevue Hospital prior to the patient's transfer. It was admitted that the patient had been violent at Bellevue Hospital, that he had had struggles with attendants there, including a severe assault upon his part upon one of the latter; but the broken rib (which at the autopsy was found to be accompanied by fractures of two other ribs, probably, in our judgment, occurring after death) was insisted upon as having occurred at this hospital, although it was discovered immediately upon the patient's arrival from Bellevue. Much was made by the deputy district attorney and by the coroner in his charge of the fact that Dr. Wright had made no mention of the broken rib in the injury blank, although the injury blank simply covers superficial injuries and it is not expected that a more complete examination will be made at Bellevue Hospital than suffices to determine their existence.

Dr. Pettit's censure was based upon the fact that he had not treated the patient for chronic nephritis, although strenuous denial was made on the part of the prosecution all through the trial that such disease existed. With a residence of less than three days in the hospital, and with the excited and weakened condition of the patient, treatment other than such as would support him and put him in condition if possible for further treatment was not, in our judgment, indicated; and in this even the physicians called in opposition agreed.

In the course of the trial, in view of certain newspaper reports as to the attitude of the district attorney's office, and of publications of grossly untrue statements, I addressed a communication to District Attorney Philbin, urging him to bring the whole matter before the grand jury. Mr. Philbin, however, did not think proper to do so, but notified me in reply that "if an investigation regarding the hospital is undertaken, every opportunity will be given to its officers to make such explanation as they may see fit."

I have duly reported the result of the coroner's inquest to the State Commission in Lunacy, and have asked that an investigation upon their part may follow. In reply I am notified that the Commission will prefer to wait until the vacancy in the legal commissionership is filled.

The success of the experiment of assigning cases of tuberculosis to tents upon the grounds of the hospital, the commencement of which was reported to your board at its last meeting, has been marked. The twenty patients who have occupied the first camp for now about forty days have all improved in general condition, gaining in weight and showing improvement in their mental condition also. Ten of the twenty have been regularly visited by their relatives, and the latter have expressed their approval and appreciation of the benefit to the patients from the change. At their visits the State Commissioners have expressed satisfaction with the results of the experiment, both verbally and practically by approving at once an estimate for two additional large tents and the necessary accompanying smaller ones. One of the large tents is intended to supplement that at present in use and to so extend the capacity of the present camp as to permit the removal from the buildings of all remaining cases of tuberculosis. With the other large tent it is intended to establish a new camp and therein to try the experiment of out-of-door treatment of the uncleanly class of patients. I am led to believe, from the results thus far of the experiment, that the occupation of tents by the insane for at least six months of the year can be extended with good results to a very considerable number. Apart from the results to the patients themselves, there will be incidentally a gain in another desirable direction. The overcrowding of the hospital buildings has for years continuously been such as to prevent the carrying out of necessary repairs and renovations. With the emptying of two or three wards in the summer time they can be thoroughly repaired and their sanitary condition so improved through non-occupation, ventilation, etc., that there can be no further excuse for betterments remaining so far behind the requirements as has been the case in the past.

Work upon the new kitchen building has so far progressed as to make it appear possible that the building contractor's promise to have his portion of the work finished during the month of August will be kept. The work upon the other contracts, however—plumbing, steamfitting, electric lighting, etc.—has not as yet commenced. In the meantime I have secured from the State Commission in Lunacy an allowance of \$5,251 for providing kitchen apparatus, and proposals for the furnishing of the same are now being invited from different dealers. A list of the necessary tables, chairs, etc., to furnish the dining-rooms in the new kitchen building has been submitted to the State Commission and is now under consideration.

Work under the contract awarded to Augustus E. Gent, for the installing of a new line of plumbing and fixtures of the water sections of wards 1, 5 and 8 was commenced on Monday last. A contract has been awarded also for the installation of hydrotherapeutic apparatus in a room connected with the receiving wards.

The second New York State Conference of Charities and Correction of this State will be held in the city of New York in November of this year. I have been notified by the executive committee of my selection as chairman of the committee on the mentally defective, and have been asked to furnish at the earliest opportunity suggestions as to the programme to be followed upon the occasion of this annual meeting. I would respectfully suggest to your board the propriety of extending an invitation to the conference to visit the hospitals under your charge during the time of the meeting, and would further suggest that the officers of the conference might be afforded the use of the city office for the purposes of the conference.

The resident steward of this hospital, Mr. Charles S. Pitcher, has made arrangements for his transfer in a similar capacity to the Long Island State Hospital at Kings Park. I have selected to fill this vacancy from the eligible list of candidates Mr. Robert J. Pye, who has for some ten years been in the service of the hospital and for the past five years as clerk in the city office at No. 1

Madison avenue. As it will be necessary to provide for the performance of the duties at the city office by a new appointee, I have arranged to defer the date of Mr. Pitcher's actual transfer and of Mr. Pye's reporting for duty at Ward's Island until your board may take such steps as you may see fit in the matter. In this connection I would respectfully ask your board to arrange for the examination of the books, etc., in the steward's office prior to relieving Mr. Pitcher and to Mr. Pye's taking charge. In my judgment such examination should be made regularly at least once a year, and certainly in the case at any time of an exchange of officers. I would recommend that the examination be made by an audit company or professional accountants, and think that it would be advisable to select examiners other than those which have already been engaged by the hospital for similar examinations in order that one examination may serve as a check upon the other.

Since report was last made in the matter, upon the occasion of your meeting on June 5th, three barges of buckwheat coal have been delivered and unloaded at this hospital—a total of 749 tons. There are now upon hand 1,953 tons, which we estimate will last under the usual conditions of use until about the last week in November of this year. The total amount of coal called for by the present contract was 12,000 tons, against which there have been delivered 7,233 tons, making a balance still due of 4,767 tons.

The last barge of buckwheat coal sent to the island was unloaded on June 17th. On the 13th of June the contractors, Messrs. Parrish, Phillips & Co., were notified by letter to deliver another barge on the 17th of June. Failing the arrival of a barge, a telephone message was sent on the date named and reply was returned that arrangements would be made as soon as possible for the sending of the barge, and that notice would be given when it could be expected. June 25th arriving without further word, and without the barge's being delivered, another similar message was sent to the contractors and a similar reply received. No barge having arrived or explanation having been

made, upon July 5th I addressed a letter to the firm asking for information, and received in reply a statement that it had been impossible to arrange for the loading of the barge and that loading and delivery would be secured as soon as it should prove possible. Up to the present time no buckwheat coal has been delivered under the contract since June 17th.

The observance of Independence Day, according to the programme issued from the printing office of this hospital, copies of which were forwarded to the members of your board in advance, was very successfully carried out. In all some 1,800 patients attended, and as many of their relatives and friends as cared to attend were invited and were present. Music was furnished by the band of the hospital, and refreshments were enjoyed and prizes distributed, purchased from the regular allowance for the amusement fund.

Yours respectfully

A. E. MACDONALD

Superintendent

NEW YORK CITY, August 14, 1901

Hon. HENRY E. HOWLAND, *President, etc.*

My Dear Sir—The superintendent being absent on his vacation, I have the honor to submit the customary report of the Manhattan State Hospital, East. The regular reports and statistics for the month of July have been placed upon file in the office of your board.

Work on the new kitchen has progressed somewhat slowly of late, due, the contractor's men inform me, to the non-arrival of the iron trusses which connect the kitchen walls. However, they arrived two or three days ago, and they will now have no good excuse for not making headway in their work. The work upon the other contracts—namely, plumbing, steamfitting, electric wiring, etc.—has not yet begun, being held back by the builder's tardiness. The proposal of Messrs. Bramhall, Deane Company to supply the kitchen apparatus, utensils, etc., being

the lowest, namely, \$4,730, the contract has been awarded to that firm.

The new line of plumbing and fixtures in wards 1, 5 and 8, contract for which was awarded to Augustus E. Gent, is being pushed along. Three men are engaged upon it, and it is expected to be finished in about a month. We are also getting ready with our own labor the room intended for the installation of the hydrotherapeutic apparatus. As soon as we are ready Mr. Richter, to whom the contract was awarded, will commence his work without delay.

Our tuberculosis camp has been extended by the addition of another large tent and its annexes. It now accommodates forty patients, and has enabled us to remove the last of this class from the hospital buildings and isolate them. Fresh air, sunshine and ample accommodations have already worked wonders. Their treatment now is being carried on under the most favorable conditions and in accordance with the most advanced and enlightened views. Their disease exhibits a marked improvement, and several have gained from ten to twenty pounds in weight. Another large tent, with its complementary smaller ones, has been established and accommodates twenty of the uncleanly class. It also is a success, and improvement is already observed in the appearance and morale of its occupants. Considerable relief has thus been afforded to the crowded wards. The patients' condition is gratifying, and their friends express the greatest appreciation when visiting them.

Since the last report in the matter of coal four barges have been received, amounting to 1,119 tons. We have up to the present time received 8,351 tons. The amount called for by the present contract is 12,000 tons, leaving a balance of 3,649 tons still due. If the contractors, Messrs. Parrish, Phillips & Co., were more prompt in their shipments and removal of empty barges, we could handle it without difficulty and be able to show a considerably larger supply on hand.

Sea bathing is indulged in by the patients four times a week. During the recent almost tropical weather as many as 1,400

men bathed at a tide, and the greatest relief was experienced after those invigorating dips. To its beneficial properties we attribute our immunity from heat exhaustion during those trying periods.

Mr. Charles S. Pitcher, until recently resident steward at this hospital, obtained a transfer to the Long Island State Hospital at Kings Park in a similar capacity, and left the hospital on the 15th ultimo. His place has been filled by Mr. Robert J. Pye, who entered upon his duties July 16, 1901.

Regarding the Wadman case, lately in the coroner's hands, nothing new has been done. The two employees held by the coroner are now under \$2,000 bail, but are doing duty in the hospital wards. Mr. Austin informs me that he attended at Part I, General Sessions, on the 1st in their interest, but found no legal grounds upon which to demur to the indictment. He thinks the case will not probably be reached for trial before the end of the year.

Dr. Frederick Peterson, president of the State Commission in Lunacy, visited the hospital on the 29th ultimo, and saw all the patients admitted since July 17, 1900, the date of the last examination by Dr. Wise. He also made a general inspection of the wards, kitchens, etc., and upon leaving commended the management.

Yours, respectfully

J. T. W. ROWE

First Assistant Physician

NEW YORK CITY, *September 11, 1901*

HON. HENRY E. HOWLAND, *President, etc.*

Dear Sir—The regular monthly reports for the month of August have been placed upon file in the office of your Board.

Work upon the new kitchen is progressing, although occasional delay has been caused by the failure of the contractor to receive material, namely, iron trusses, hollow bricks, etc. The building is now partly roofed with sheathing boards, which will afford but little protection against the heavy autumn rains

due at any time. The contractor who has the contract for the plumbing and electric wiring has also made a start during the past few days and is now making connections with the sewer.

The renewals and alterations in the water sections of wards 1, 5 and 8 is a rather slow job. Four men are engaged upon it, and the stage of laying the tile in ward 5 has only just been reached. The improvement in the sanitary condition will be so marked as to make it a matter of deep regret that the Commission has deferred similar improvements in the other and equally bad sections.

On account of Messrs. Parrish, Phillips & Co.'s contract for 12,000 tons of buckwheat coal, we have received up to date 9,138 tons. Four barges, amounting to 1,012 tons, have been received and discharged since the last report to your board, which leaves a balance still due of 2,862 tons.

The work of installing the hydrotherapeutical appliances in ward 2 has not advanced since the last report. Mr. Richter, who is doing it, says most of the apparatus has had to be manufactured for the job, but in a day or two he expects to begin work in earnest and will soon bring it to completion.

On Labor Day a most enjoyable programme of sports by patients and employees was carried out. The day being delightfully fine, all the patients except the bedridden were upon the field. Fully 1,800 of our own, as well as 250 patients in addition from the West Hospital, enjoyed the event. The patients' friends, between 200 and 300, also witnessed the games and expressed their enjoyment upon leaving. Prizes were given to the winners and a bountiful supply of cake and lemonade was served to everybody, thus closing a very successful day.

Sea bathing has been availed of four times weekly. From 1,000 to 1,400 patients have enjoyed its invigorating effects each time. Knowing its valuable properties, we shall continue it as late in the season as possible.

The results of the treatment of the tuberculosis and uncleanly cases in tents in the open air continue to be most satisfactory. The patients steadily increase in weight, and a decided improve-

ment is apparent in their mental and physical condition. Their friends never fail to express their appreciation after visiting them. We are now making arrangements looking to permanent residence well into, or even through, the winter.

On the 4th instant twenty-one patients were transferred to the Manhattan State Hospital at Central Islip to fill vacancies. Their journey by boat and rail was uneventful, and they reached their destination in good condition.

We have just installed in our bakery a dough-kneading machine of eight-horse power and a capacity of five barrels of flour. It was put up by the Durand Kneading Machine Company, at a cost to the hospital of \$1,200. Heretofore the bread for 5,000 persons has been made by hand, subject to delay and changes of temperature and the variable skill of the bread-makers, who are patients. The results so far are very satisfactory. The bread is of a better quality, and a larger number of pounds to the barrel is turned out than under the old system.

A letter under date of the 22d ultimo, from Mr. Heins, the State Architect, addressed to the board of managers, recommending that the proposition of Mr. R. T. Ford for additional piping and radiating surface in the second story of the new kitchen be approved, was submitted to the chairman of the finance committee for approval.

Yours, respectfully

J. T. W. ROWE

First Assistant Physician

PRINTING OFFICE REPORT FROM OCTOBER 1, 1900, TO
SEPTEMBER 30, 1901

MANHATTAN STATE HOSPITAL, EAST

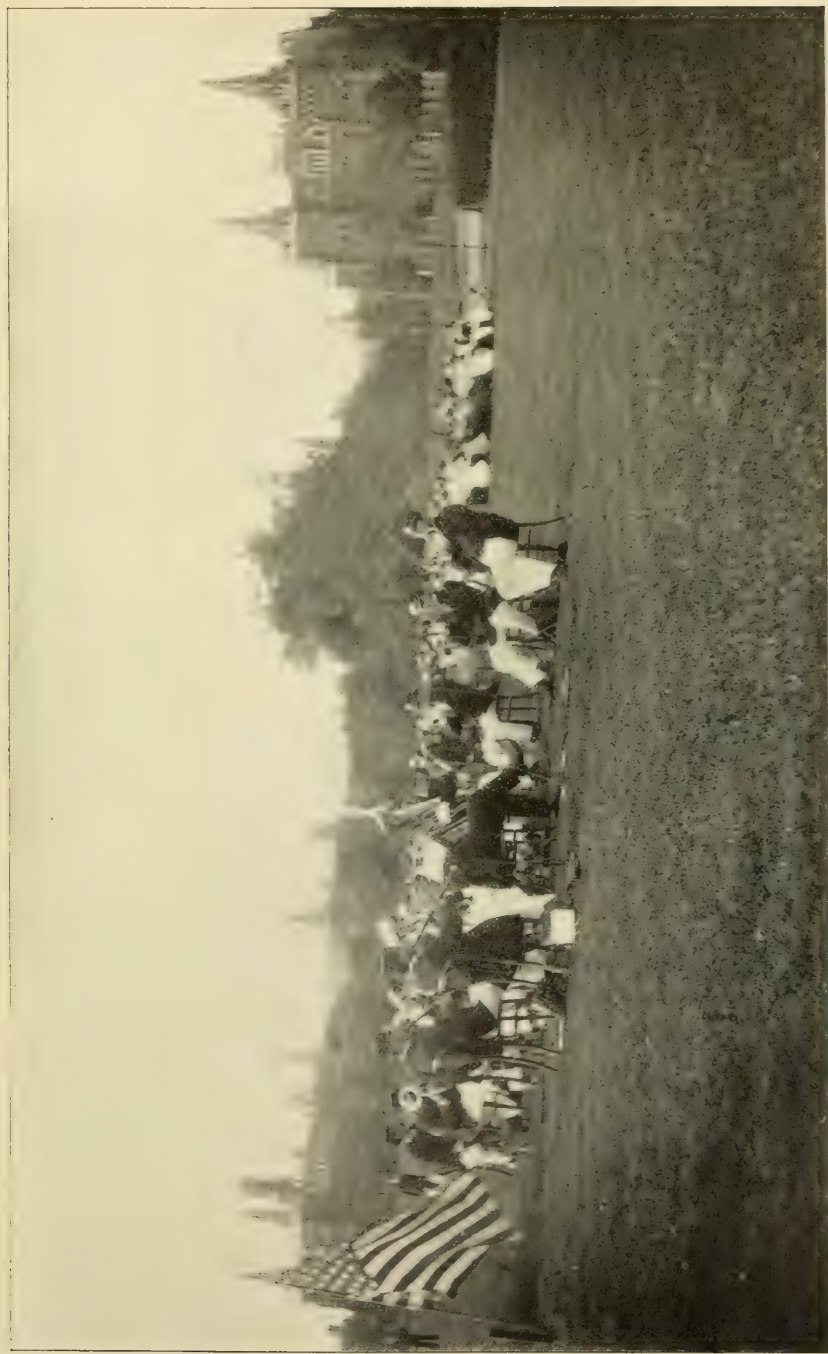
Letter heads, plain, etc., foolscap, legal cap, estimates, certificates, vouchers, covers, extra diet and store orders, store, engineer's, electrician's, tailor's reports, day and night reports, laundry lists, requisitions, admissions, leaves of absence, discharge, resignation, ward records, clinical records, laboratory reports, certificates of insanity, death, sick notices, application blanks, form 161, estimates 1 to 12 and special fund vouchers.....	268,500
Pads, assorted sizes.....	1,100
Passes, ward passes, steamer and ferry passes, prescription blanks	85,000
Daily census slips.....	2,300
Envelopes of all kinds.....	13,000
Cards: ward, bed, census, admission, etc.....	9,200
Bank checks	1,000
Affidavit blanks	300
Endorsement blanks, order appointing committee....	500
Calendars, 1901	300
Hymn books, 36 pages.....	200
Service books, 18 pages.....	300
Names for bulletin board.....	400
Extracts from rules and regulations, book form, 8 pages	100
Programmes	7,000
Copies of training school schedule, 12 pages each....	200
Commitment blanks	500
Copies of rules and regulations, in book form, 24 pages, each.....	50
Copies of rules and regulations, in book form, 10 pages, each.....	500
Copies of rules and regulations, in book form, 16 pages, each.....	100
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	390,550

MANHATTAN STATE HOSPITAL, WEST, WARD'S ISLAND

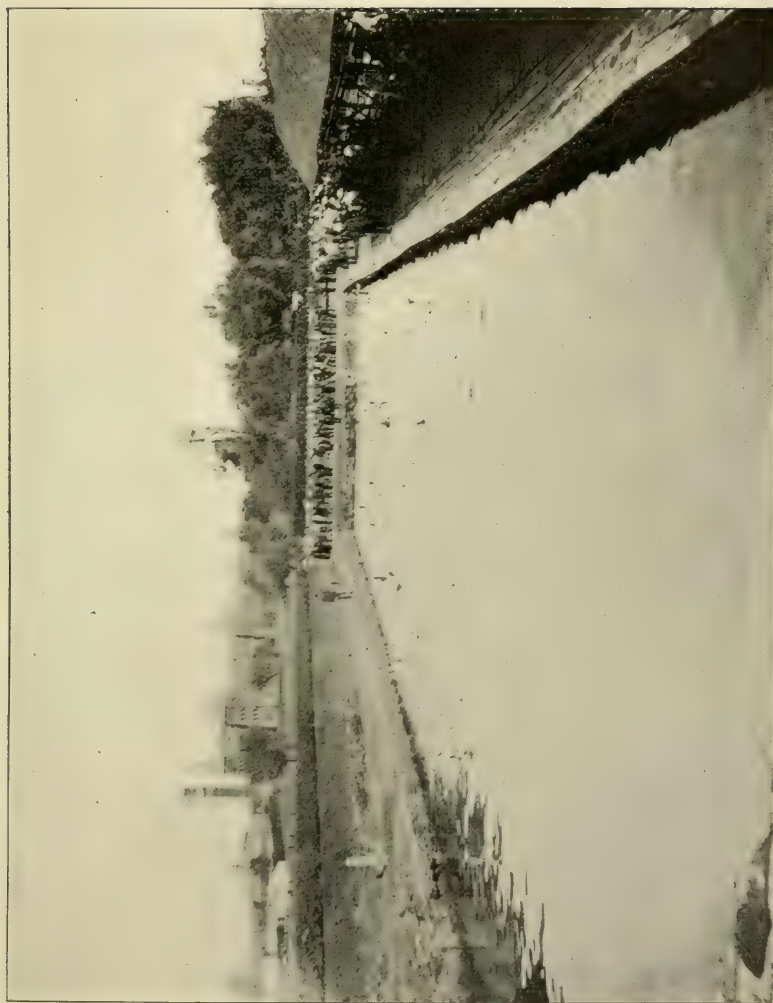
Letter heads, plain, etc.; foolscap, estimates, certificates, orders; diet and store, day and night, physician's reports and form 161, estimates 1 to 12 and special fund estimates, etc.....	145,500
Passes, prescriptions, duty blanks, time sheets.....	100,000
Envelopes, all kinds.....	13,175
Census blanks	2,000
Cards; census, ward, admission, etc.....	6,000
Programmes	1,000
Checks	1,000
Copies of officers' laundry books, in book form, 50 pages each	48
Copies of meat specifications, 8 pages each.....	30
Copies of training school schedule, 20 pages each....	100
Copies of rules and regulations, in book form, 27 pages each	50
Copies of rules and regulations, in book form, 16 pages each	550
	<hr/>
	269,453
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MANHATTAN STATE HOSPITAL, CENTRAL ISLIP

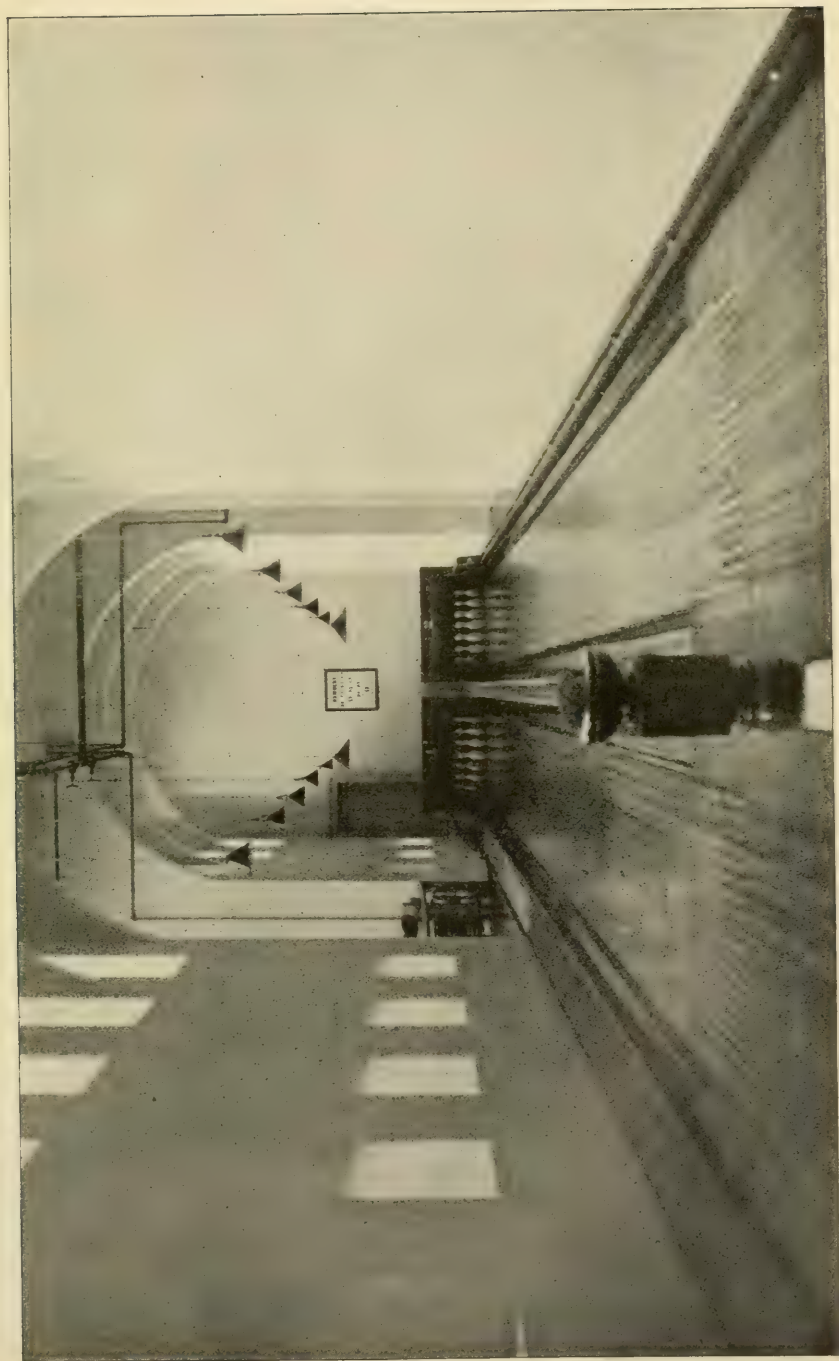
Letter heads, plain, etc.....	105,000
Form 161, estimates 1 to 12, and special fund estimates, etc.	15,690
Passes	500
Envelopes	17,050
Cards	2,400
Application blanks, 4 pages.....	100
Programmes	1,000
Copies of training school schedule, 12 pages each....	50
Copies of rules and regulations, in book form, 10 pages each	300
Copies of rules and regulations, in book form, 16 pages each	50
Copies of rules and regulations, in book form, 24 pages each	25
	<hr/>
	142,165
	<hr/> <hr/>



MANHATTAN STATE HOSPITAL—EAST.—HOSPITAL BAND CONCERT.



MANHATTAN STATE HOSPITAL—EAST.—SALT WATER SWIMMING BATH.



MANHATTAN STATE HOSPITAL.—EAST.—BOWLING ALLEY.

LONG ISLAND STATE HOSPITAL, KING'S PARK

Letter heads, form 161, estimates and special fund estimate, reports; tailor's, dressmaker's, etc.....	370,500
Copies of training school schedule, 16 pages each....	50
Prescription blanks	15,000
Cards, time, leave of absence and filing cards.....	9,700
	<hr/>
	395,250
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LONG ISLAND STATE HOSPITAL, FLATBUSH

Letter heads, estimates, certificates, form 161, special fund estimates, etc.....	81,671
Copies of training school schedule, 12 pages each....	50
Visitors' passes, steamer passes, prescription blanks, etc.	13,100
Programme of sports, etc.....	400
Ward cards	3,000
	<hr/>
	98,221
	<hr/>

WILLARD STATE HOSPITAL

Letter heads, form 161, estimates 1 to 12, etc.....	127,500
Envelopes	2,000
Leave of absence cards.....	4,000
Copies of individual laundry books, in book form, 50 pages	300
	<hr/>
	133,800
	<hr/>

PURCHASING STEWARD

Forms, orders, letter heads, vouchers, etc.....	87,500
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Total printed matter.....	1,516,939

RULINGS

Blanks of various rulings of State forms.....	236,525
	<hr/>
Grand total	1,753,464
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MAT SHOP REPORT OF ARTICLES MADE AND REPAIRED
FROM OCTOBER 1, 1900, TO SEPTEMBER 30, 1901

Manufactured

Brooms	2,500
Brooms, whisk	206
Mattresses	1,390
Pillows	1,053
Mattress ticks	395
Coir mats, single.....	306
Pillow ticks	390
Coir mats, double.....	15
Coir mats, extra.....	26
Fancy mats, single.....	65
Fancy mats, double.....	12
Rag mats, single.....	70
Rag mats, double.....	4
Cuspidor mats	312
Brush mats, single.....	34
Brush mats, double.....	12
Brush mats, extra.....	1
Coir rings	401
Stable brooms	10
Manila mats, single.....	7
Flower pot mats.....	88
Dust brushes	205
Window brushes	225
Shoe brushes	366
Bath brushes	100
Scrub brushes	555
Floor brushes.....	139
Waste paper baskets.....	67
Flower pot baskets.....	610
Letter trays	12
Clothes hamper	1
Chairs caned	223
Window shades	50

Lounge upholstered	1
Chairs upholstered	3
Carpets laid	4
Linoleums laid	3
Awning	1
Slip covers	7

Repaired

Window shades	59
Mats	55
Tent covers	3

TAILOR SHOP REPORT FROM OCTOBER 1, 1900, TO SEP-
TEMBER 30, 1901

The following were made:

Pants	3,494
Coats	1,434
Vests	573
Duck coats	275
Duck pants	220
Canvas coats	41
Canvas pants	45
Overalls	165
Jumpers	101
Hats	1,330
Caps	1,201
Mittens	2,199
Aprons	138
Neckties	320
Coffee strainers	140
Bathrobes	34
Dressing-gowns	18

The following were repaired:

Coats	2,152
Pants	4,791
Vests	1,188
Overcoats	1,413
Sheets	26

SHOE SHOP REPORT OF ARTICLES MANUFACTURED AND REPAIRED FROM OCTOBER 1, 1900, TO SEPTEMBER 30, 1901

Manufactured

Shoes, men's, pairs.....	1,724
Shoes, women's, pairs.....	3,029
Slippers, men's, pairs.....	8
Slippers, women's, pairs.....	150

Repaired

Shoes, men's, pairs.....	2,920
Shoes, women's, pairs.....	333
New leather razor strops, dozen.....	14
Music bags, pieces.....	12

LAUNDRY REPORT FROM OCTOBER 1, 1900, TO SEPTEMBER 30, 1901

The total number of pieces laundered during the year was 629,583.

SOAP MAKER'S REPORT

The total amount of soap manufactured during the year ending September 30, 1901, was as follows:

Bar, pounds	31,265
Chip, pounds	11,633
Bath, pounds	1,475
Shaving, pounds	289

CARPENTER'S REPORT

Bowling Alley

Took up the old floor and sleepers in the dormitory of ward 17 to prepare it for a bowling alley; shored up the walls and made centers for mason to turn his arches on; repaired all doors and sashes connected with it; laid new sleepers and about 700 feet of Georgia pine flooring, and made and put up a guard-rail in front of recess.

Large Greenhouse

Shored up the roof; took out the old front which was entirely decayed and replaced it with new timbers; new ceiling plank; new sash and new cornice. Built 3 new flower beds, each 60 feet long, and put up 4 lines of shelves, each 120 feet long.

Hospitals 1 and 2

Ripped up all the base in Hospitals 1 and 2; overhauled all the doors and windows; put new stop beads and pasting strips throughout; new sash cords when required; put new base blocks under all door trim; fitted up the pantries with new racks for sinks; new draining boards, hatracks and new shelving, and prepared the floors of same for concrete. Took up portions of old floor where very much worn and relaid 4,000 feet Georgia pine flooring and repaired the balance.

Main Hall, Main Building

Took down all the doors in main hall, and after thoroughly repairing them put them back in place; put down new saddles where required. Took up the old floor in pantry, ward 1, and relaid the same with new Georgia pine flooring; made and put up new pair of door jambs, trim, etc., and put up new shelving, new draining board, etc.

Ward 2

Repaired all the doors and windows; put in four pairs of new sash; put new sills in all the windows; new stop beads and parting strips where required; put a new seat-let into the brickwork

under the window in 17 dormitories. Took up the old floor which was worn out in the pantry, dining-room, and 16 dormitories and photographer's room, and relaid the same with some 4,700 feet of Georgia pine flooring, and put down 75 feet of Georgia pine saddle. Made and put up new door jambs, window jambs and trim in pantry, and put up new shelving, draining board, etc.

Ward 9

Ripped up the old base and relaid 700 feet of new base and base moulding; overhauled all the doors; put down new saddles; repaired the flooring where needed. Fitted up the clothing-room with new shelving; put new inside oak casings on 60 windows and put on 240 iron plates, bolted on the inside, to fasten the iron window screens to. Made 7 shoeblackening benches; repaired 2 old ones; made 30 flower boxes; repaired 2 butcher blocks; made 4 bread boxes; repaired 2 bread boxes and 1 bread basket; sharpened 18 bread knives; made 1 new bookcase and repaired 1. Made 6 hand barrows for carrying ashes; repaired 1 rowboat; made 1 stone boat; made 4 boxes to hold soiled clothing; 3 soap boxes; 7 boxes; 2 stands and 2 frames for photographer; 7 boxes for electrician and 1 tool-box for mason; made 34 bedboards; 12 bottoms for coffee cans; made 6 cart rungs; put up 1 gross of coat and hat hooks; made 2 barber's chairs; 7 crates for packing; 9 closets; 12 checker boards; repaired 3 chiffoniers; repaired 39 drawers; 113 doors; 6 desks; 1 dish drainer; made 19 new paneled doors; 9 battened doors; made 5 dish drainers and stands for same, and 3 dozen door stops; built 1 large platform for entertainments in large dining-room, east building; erected grand stand for outdoor sports on Decoration Day, Fourth of July and Labor Day; repaired about 500 feet of line fence at north and south end of island where weakened by storm, and put up new pickets where required; repaired 400 feet of rail fence leading to bakery; framed 31 fire-alarm signals; made 3 frames for mat shop; 2 frames for printing office; 5 food trays; 4 fan lights; built frame to slaughter bull; made 1 semicircular flower stand; made and

put up a large gate in line fence; put up gate entrance to east building; made 2 covers for garbage boxes; made handles for 23 hammers, 4 hoes, 2 shovels, 6 dippers, 1 shears; repaired 2 large ice houses in main kitchen; moved these ice houses later to effect an entrance on the west side; built a temporary fire-escape to ward 12 and timbered and floored the new iron fire-escape; repaired the ice house near large reservoir; made case for milk-testing machine in drug store; made body for mason's hand cart; made 2 mallets; made platform for dough-kneading machine in bakery; put up partition in truck house, and sliding sash in same; made 15 new floor polishers and repaired 21 others; put up 100 feet of picture molding; supported the floor of printing office, erected rigging and hoisted printing press and imposing stone; took up and relaid 500 feet of flooring in printing office, cut opening in partition and put in 1 pair of doors and 1 single door. Made 1 flag pole and 1 curtain pole; made 5 new peels and 13 peel blades; made 8 sets of quoits and cues for floor shuffleboards; made 1 foot rack, 6 racks for holding barrels, 1 rack for bowling balls and 1 rack for rubber stamps; made 26 stands for ward quoit games, 9 toilet screens, 1 shaft for hearse, 24 closet seats; made 2 fire screens of three folds each; put on 5 dozen sash fasteners; repaired 66 window sashes; made 4 new ladders; repaired 7 stepladders and 2 extension ladders; made 4 skids to hold vinegar and molasses barrels; took down the old stoop in the rear of attendants' home which was in a dangerous condition, and put up a new stoop, new railing etc.; put up a seat 190 feet long at salt water baths, repaired the gates and other seats and flooring; made platforms for 13 tents of the following sizes: 3 20 feet by 40 feet, 2 octagon 15 feet diameter, 5 12 feet square and 3 9 feet square; made 5 towel rollers; 8 targets for golf playing; made 12 dining tables, 10 ice cooler tables, 5 table tops; repaired 15 dining tables and 3 ice cooler tables; cut 10 ventilating holes in bakery; repaired 3 ward-robies; put together 60 new wheelbarrows and repaired 82 others; put 65 feet of weather strip on the steamer "Mermaid"; built 2 water-closets at east building for use of tents, and 1

water-closet for printing office; made 2 wardrobes; repaired 850 chairs, 362 settees; renewed 440 sash cords; made 303 coffins; repaired several ice boxes; sharpened ice saws, butchers' and surgical saws; secured many locks; put on several new ones; fastened mirrors; put up shelving where required; put saddles under several doors where worn out; refastened as many of the iron window screens, door knobs, escutcheons, hinges, etc., as were loose, from time to time. Repaired several patches of flooring in the east building and also in ward 17 and main kitchen dining-rooms.

We are at present engaged in converting a former dormitory in ward 2 into a douche room; also altering 2 dormitories in ward 1, east building, so as to make 2 lavatories.

ENGINEER'S REPORT

Two new Shaw blow-off cocks put on boilers at east building boiler house; new pipe coils for steam heating put in rooms 36 and 78, attendants' home; two radiators put in printing office in room at north end; two vitrified sinks, brass traps and fittings installed in pantries of hospitals No. 1 and No. 2; also cement floors and floor drains in same pantries. Plate warmers installed in pantries of wards No. 1 and No. 12, and in pantries of hospitals No. 1 and No. 2.

Closet installed on second floor main boiler house for use of firemen and the employees of printing office; three new pipe coils installed for heating bowling alley; bathtub installed at dock-house on East One Hundred and Sixteenth street dock; new galvanized iron sink put in ward 9; water piped from basement of east building to supply tents at camps "A" and "B;" new galvanized sink installed in staff kitchen; new closet and basin installed in toilet room used in connection with the bowling alley. Closet set up and connected to sewer for use of patients in tents of east building; also same work done for patients occupying tents west of east building.

Sloping cement floor and floor drain put in autopsy room under hospital; sewer line run from main building to main sewer to take waste water from therapeutic bath in ward 2.

New milk tester installed in drug store; new whistle valve put in "Mermaid;" put new pulley on line shaft and belted up new printing press. New connecting rods on valve stems to feed pump at east building boiler house, and new valve rods on bath pump in main boiler house. New wire rope put on counterweight to dumb-waiter, wards 13, 14, 18, 19, 21 and 22. New wire ropes put on dumb-waiter car to east building dining-room; renewed old and corroded steam pipe in various places in basements of main and east buildings; nearly 200 feet of new pipe put in. Covered new hot-water tank in basement of east building with felt, asbestos paper and canvas. Installed engine to drive kneading machine at bakery and piped steam to engine from east building boiler house. New urinal set in ward 9; put new manila hand ropes on dumb-waiters in wards 3, 7, 11; wards 1, 2, 5, 6, 8, 9, 13, 14, 17, 18, 19, 21, 22 and 23. Running soil pipe (about 180 feet) and connecting leaders from roof of attendants' home with sewer; five-inch leader connected from roof of administration building to sewer line; one new six-inch climax clamp put on line to hospital. Made, drilled and tapped iron plates for window guards for 110 windows in wards of main building. Made and placed in position a section of fire-escape (about 14 feet long) to cross over new driveway to kitchen and connect to fire-escape from ward 12; covered 2,100 feet of steam lines and returns and hot-water pipes with asbestos paper, felt and canvas. New steam coil installed in toilet-room in east wing basement of main building, near bowling alley. Radiator for additional heat installed in X-ray room, north end of ward 2.

TINSMITH'S REPORT—ARTICLES MANUFACTURED DURING THE YEAR

Tin

Made 27 20-gallon cans; 2 10-gallon cans; 111 6-gallon cans; 120 4-quart cans; 72 2-quart cans; 10 20-gallon coffee and tea boilers with $\frac{3}{4}$ -inch faucets; 14 15-gallon coffee and tea boilers with $\frac{3}{4}$ -inch faucets; 40 large coffee and tea cans, assorted; 21 small coffee and tea cans, assorted; 24 14-quart tin pails; 7 soup

tureens; 39 dishpans; 72 chambers; 186 covers, assorted; 1 1-gallon measure; 140 flower trays; 14 drip trays for water coolers; 2 saucepans; 68 dippers, assorted; 20 pudding pans, assorted; 12 cake pans, assorted; 12 partitions for drawers; 1 glue boiler; 9 strainers, assorted; 1 alcohol lamp; 148 cuspidors; 7 water coolers; 166 dustpans; 2 watering cans; 72 drinking cups; 4 funnels, assorted; 2 hot-air stoves; 4 mess boxes, large; 12 mess boxes, small; 24 butter boxes; 60 tin boxes, assorted; 3 sieves; 4 oatmeal boilers; 2 scoops; 9 slop-water jars; 4 meat pans; 14 sleeves with floor plates for steam pipes; 179 lettering numbers; 6 frames; 14 electric-light shades; 1 teakettle; 2 pudding boilers.

Galvanized Iron Ware.

One hundred and seventy-three buckets; 12 flower trays; 72 cleats for wire frames; 3 covers; 12 dust cans; 1 strainer; 1 frame for radiator cover; 16 potato steamers; 1 leader head; 1 hot-water tray; 150 hooks; 1 box; 1 tray; 59 feet gutters, assorted; 253 feet leader pipes, assorted; 8 elbows; 2 caps and collars; floor in staff kitchen and pantry partly covered with galvanized iron.

Iron Ware

One bed table; 1 wire rack; 12 wire frames; 36 wire netting frames; 1 wire cutting gauge; 44 bolts and nuts; 1 spark protector; 72 rings; 10 set screws; 59 machine screws; 6 push-bolt plates; 14 thumb screws; 2 crochet hooks; 1 pin for door hinge; 1 rubbish can; 1 fire pot; 2 egg beaters; 1 die; 6 screw hooks; 14 washers; 96 feet of stove pipe, assorted; 4 elbows; 3 caps; floor under printing press covered with sheet iron.

Russian Iron Ware

Sixty queen bread pans; 44 roast pans, assorted.

Brass Ware

Thirty-five bolts and nuts; 1 ruler; 223 escutcheons; 61 striking plates; 16 tops for medicine trays; 1 thumb screw; 1 liquid

measure; 1 drip tray with strainer; 40 letters and numbers; 1 oil feeder; 2 strainers; 1 oil can; 13 floor plates; 25 washers; 4 curtain rods; 1 die; stand for programme numbers.

Copper Ware

One spray; 1 20-gallon boiler; 3 large strainers; 1 eel catcher; 1 frame; 1 tripod; 1 square plate with set screws for X-ray machine; table for milk tester, covered with copper; 1 pair of oars, lower end covered with copper.

Zinc Ware

Nine golf cups; 2 ice-water cans; 2 ice boxes, lined; large table in staff kitchen lined.

Miscellaneous

Two hundred and nine keys, assorted; 6 letter files; 9 locks changed.

Stamped

One hundred and nineteen knives; 128 forks; 168 tablespoons; 193 teaspoons.

REPAIRED THE FOLLOWING

Tinware

Forty-four 20-gallon cans, with new bottoms; 75 6-gallon cans, with new bottoms; 7 5-gallon cans, with new bottoms; 2 20-gallon coffee boilers, with new bottoms; 2 15-gallon coffee urns, with new bottoms; 16 40-quart cans, with new bottoms; 1 32-quart can, with new bottom; 18 coffee and milk cans, assorted, with new bottoms; 3 dishpans, with new bottoms; 2 watering cans, with new bottoms; 1 saucepan, with new bottom; 17 water coolers, with new bottoms; 18 water coolers, new linings; 118 20-gallon cans; 198 6-gallon cans; 10 5-gallon cans; 8 1-gallon cans; 10 20-gallon coffee boilers; 7 15-gallon coffee urns; 36 40-quart cans; 27 32-quart cans; 31 coffee and milk cans, assorted; 15 meat pans; 3 feeding cups; 12 pudding pans, assorted; 6 measures, assorted; 28 dippers, assorted; 8 trainers, assorted; 328 chambers; 85 cuspidors; 27 tin pails, assorted; 9 drip trays

for water coolers; 19 mess boxes, assorted; 12 oil cans; 4 egg boilers; 151 covers, assorted; 10 watering cans; 6 dustpans; 6 wash basins; 13 dishpans; 2 boxes; 9 saucepans; 4 coffee pots.

Galvanized Iron Ware

Forty buckets, with new bottoms; 2 potato steamers, with new bottoms; 4 dust cans, with new bottoms; 14 ice boxes, with new linings; 2 hot-water trays; 9 dust cans; 1 drip pan; 51 buckets.

Russian Iron Ware

Seventeen roast pans; 180 queen bread pans.

Brass Ware

Two nozzles; 10 medicine trays; 1 camera stand; 10 faucets; 4 buttonhole hammers; 1 lamp; 68 lanterns; 374 locks, assorted; 54 door knobs; 2 door springs.

Iron Ware

Three window screens; 2 railings; 2 shovels; 1 tiller chain; 13 wire screens; 1 fire-escape; 16 fire doors; 3 sprinklers; 1 window bar; 12 music stands; 2 bed tables; 1 bedspring; 3 egg beaters; 19 ventilators.

Copper Ware

Eight large strainers repaired and retinned; 4 saucepans; 1 spray.

Machines and Machine Parts

Forty-one mowing machines; 1 sowing machine; 4 cultivators; 1 landside plate for plow; 3 hair clipping machines; 1 hair clipping chain; 2 belt shifters; 1 small shaft for thread spool; 1 buttonhole cutter; 1 treadle; 3 typewriting machines; 1 eyelet machine; 1 pencil sharpener; 1 press plate for printing press; 1 pump; 1 scale; 1 hinge for washing machine; 1 setting-down machine; 1 beading machine; 1 wiring machine.

Miscellaneous

Eighty-three scissors, assorted; 61 carving knives; 9 surgical knives; 8 safety razors; 3 church windows; 45 clocks; 1 dough bowl; 2 artificial legs; 21 spectacles; 20 crutches; 6 bread cutters; 1 interrupter; 1 valve for laryngoscope; 2 tree pruners; 1 butcher's saw; 3 fire pails; 111 keys and whistles repaired and stamped; floor polishers filled with lead, 13; put wooden bottoms on 24 large tin cans; made 454 pounds lead out of tea lead; made 313 pounds of solder.

Roofing Work

Repaired and painted roof and gutters on bakery; covered roof of cow shed and tool house with tar paper; painted roof, gutters and leaders on southeast wash house and put on new scuttle; painted roofs on hook and ladder shed, lumber shed, wagon shed, band room, scale house, dock house, gate house, west pass way, main building, and water-closets northeast and southwest from main building, smokestacks on stable, barn and blacksmith shop. Made new gutter linings and leaders on carpenter shop and partly on wards C and G, east building, and ward 19, east side. Put up new leaders on barn and repaired gutter; repaired leaks on roofs and gutters ward 11, east pass way, main building, printing shop, attendants' home, wards G and C, east building, and centre building, east building. Repaired slate work and put on new flashings and ridge moldings on southwest and southeast towers on wards 11 and 23 and hospital; new flashing around chimney ward I; repaired gutters on southeast side of church and main boiler house; repaired roof on fire-escape leading to ward 11; skylights on wards C and G and ventilators on ward 8 and southeast boiler house; roof on north side of greenhouse; put on new roof on extension to fire-escape ward 12 and painted; removed iron window bars from six windows ward 2, and one window, ward 17.

The following work was done for the

MANHATTAN STATE HOSPITAL WEST

New Tinware

Thirty-two large mess boxes; 74 small mess boxes; 24 medium mess boxes; 72 dishpans; 96 wash basins; 24 milk and coffee cans, assorted; 129 small tin cans, assorted; 60 6-gallon cans; 36 covers; 12 potato steamers; 60 cuspidors; 36 flower trays; 62 dippers.

Galvanized Iron Ware

Sixty buckets; 4 drip pans; 1 map case; 5 soap boxes lined.

REPAIRS

Tinware

Forty-nine mess boxes, assorted; 5 20-gallon cans; 1 6-gallon can; 37 large milk and coffee cans, assorted; 21 small milk and coffee cans, assorted; 37 dishpans; 10 tin boxes, assorted; 1 tin pail; 10 dippers; 1 1-gallon measure; 3 dustpans; 8 coffee pots; 2 scoops; 3 strainers; 5 skimmers; 5 water coolers; 1 wooden pail; 1 coach lantern; 1 drip pan; 1 saucepan; 1 large mess box, with new bottom; 8 20-gallon cans, with new bottoms; 3 milk and coffee cans, assorted, with new bottoms; 19 dishpans, with new bottoms; 1 water cooler, new lining.

Russian Iron Ware

Twenty-three queen bread pans; 17 roast pans.

Galvanized Iron Ware

One bucket, with new bottom.

Brass Ware

Twenty-eight bird cages; 2 clocks.

PAINTER'S REPORT

Painted wards 2 and 9; hospitals 1 and 2; bowling alley; two rooms in printing office; painted and glazed large greenhouse; one policeman's watch house; two fire-escapes; one solarium; one room ward 17; one stairway, east wing; one room ward A;

one pantry, ward 1; four water-closets; four large gates; 100 feet of fence; main hall, main building; 1,135 chairs cleaned and varnished; 60 rocking chairs cleaned and varnished; 390 benches and settees cleaned and varnished; 475 cuspidors painted; 321 chambers painted; 315 bedsteads painted; 75 bed springs painted; 86 tables cleaned, painted and varnished; 10 ice boxes painted; 40 drip pans painted; 7 wardrobes varnished; 12 desks cleaned and varnished; 146 flower stands painted; 49 water coolers painted and lettered; 1,000 feet of 4-inch molding painted; 4 stepladders painted; 7 commodes painted; 16 radiators bronzed; 280 window screens painted; 16 washstands cleaned and varnished; 10 canvas screens painted; 7 watering pots painted; 2 clocks lettered; 21 checker boards painted; 5 dustpans and 20 bed boards painted; 8 slop jars and 2 rubbish cans painted; 8 water tubs and 3 bath tubs painted; 14 water drainers painted; 8 boxes for games varnished; 204 farm and garden baskets lettered; 3 row boats painted; 10 coal carts and 4 wagons painted, striped and lettered; 303 coffins stained; one stoop painted; 2,080 lights of glass put in; 4 doors painted.

MASON'S ANNUAL REPORT FOR THE YEAR ENDING SEPTEMBER 30, 1901

Removed from basement east wing, main building, to widen bowling alley, 7 feet 2 inches wide to make same 12 feet 6 inches wide: 14 brick piers, size 2 feet 8 inches by 8 by 14 feet, 2 brick walls, size 12 feet 6 inches by 12 by 16 feet, 1 brick wall, size 12 feet 6 inches by 8 by 16 feet, that supported 10 interior walls 33 feet high, 12 feet 6 inches wide. Supported same with ten brick arches 12 feet 6 inches span. Built brick wall at recess of bowling alley, 16 feet by 16 by 8 inches. Built brick wall at pit of bowling alley, 12 feet 6 inches by 16 feet by 8 inches; built twenty openings in bowling alley, 2 feet 8 inches by 16 inches by 5 feet; built two openings in bowling alley, 2 feet 8 inches by 7 feet 4 inches by 16 inches; put in concrete floor for bowling alley, 64 cubic yards; pointed up all walls, repaired ceilings and built toilet room for same.

Built up under all windows ward 1 and plastered same; plastered around 35 windows where casing was taken away ward 2, making plaster molding around same: deafened floor where necessary ward 2; cut door through wall of therapeutic room, ward 2.

Repaired plaster for painting wards 2 and 9, printing office, dining-room ward 1, basement under hospital 1; repaired cement floor of basement main building, main building hall: put in two toilet rooms and concrete floors ward 1, east building; concreted yard at main kitchen 48 cubic yards: repaired 7 boilers, 6 ovens from time to time: put in concrete floors hospitals 1 and 2 in pantry: put in concrete floor photographer's room under hospital 1.

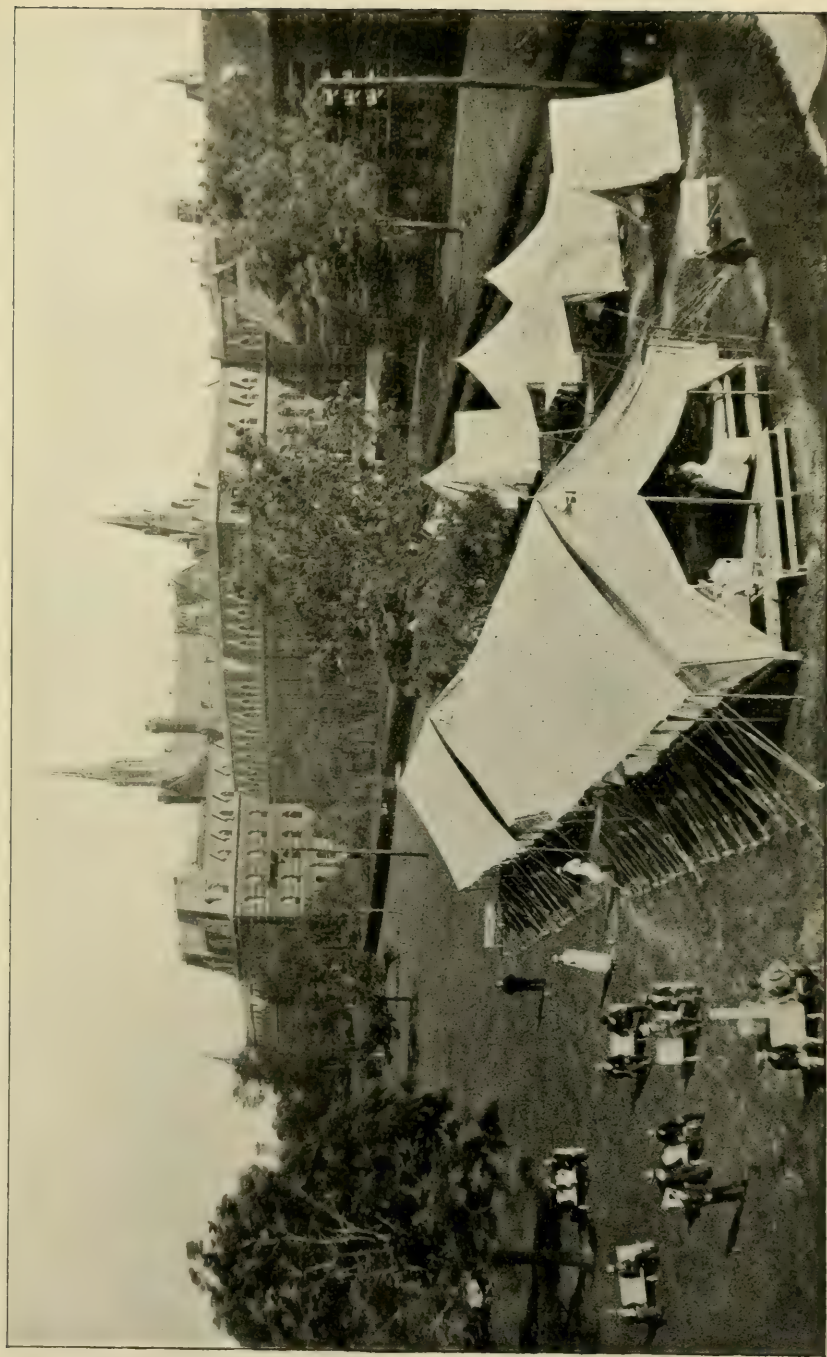
Removed entrance to kitchen yard east or rear entrance main building to west of same.

Built two manholes at east building and reservoir, size 3 feet 6 inches by 4 feet. Made general repairs through all buildings.

ELECTRICIAN'S REPORT

New work was done during the year ending October 1, 1901, as follows:

Rewired basement at ward 17 and installed electric light mains and branches for lighting bowling alleys; ran a metallic telephone line on poles and put up two telephones for service to launch dock. Installed new transmitter on telephones in boiler house, linen room, printing office, clerk's office, attendants' home, hospital 1, ward 17 and east building; ran new bell service from superintendent's office to clerks' office; installed one 12-inch fire-alarm gong in attendants' home: constructed and installed four 2-light electric fixtures in ward 23; installed two electric brackets in ward 2 for lighting room in which static electric machine was placed; ran lines for ground connections to static electric machine; installed electric mains and branch circuits for lighting hospital tents and supplied same with suitable switches, cut-outs and fixtures; rewired main hall with interior iron-armored conduits, new switches and cut-outs, and supplied



MANHATTAN STATE HOSPITAL—EAST—EXTERIOR CAMP A—TUBERCULOUS PATIENTS.



MANHATTAN STATE HOSPITAL—EAST—INTERIOR CAMP A—TUBERCULOUS PATIENTS.



MANHATTAN STATE HOSPITAL—EAST—EXTERIOR CAMP B—DEMENTED AND UNCLEANLY PATIENTS.

offices with new branch circuits of No. 14 B. & S. wire in place of No. 16 B. & S.; rewired 12 fixtures; installed six new brass 2-light electric fixtures in staff offices, and ran line for messenger call service. Ran new line for bell service on dumb-waiter in superintendent's residence; installed combination night and day lights in sick rooms in wards 14 and 19; installed new battery bank on main fire-alarm system; installed new electric fixture over steam damper regulator in main boiler house; installed porcelain shades on all electric fixtures in hospitals 1 and 2 and ward 20. Ran three new drop lights in printing office; ran new circuit in steward's office and three new flexible cord drop lights; ran new line through east building basement for telephone service, and installed new battery bank; rewired fixtures and put in new fibre-lined sockets in bakery; installed four key wall sockets in hall leading to bath in basement of west wing of main building; installed six new deep flush C. & C. switches in east building; ran new electric bell service for elevator in hospitals 1 and 2.

FARM AND GARDEN PRODUCTS

Asparagus, bunches	5,883
Beets, bushels	558
Beans, lima, bushels	70 $\frac{1}{4}$
Beans, string, bushels	353 $\frac{3}{4}$
Beet greens, barrels.....	261
Beans, butter, bushels.....	2
Beef, pounds	793
Blackberries, quarts	58
Cabbage sprouts, barrels	17
Cabbage, heads	6,675
Cauliflower, heads	130
Chillies, quarts	334
Carrots, bushels	194 $\frac{1}{4}$
Celery, bushels	2,938
Citron, dozens	64
Currants, quarts	179
Cucumbers, dozen	488 $\frac{1}{2}$

Corn, sweet, ears	11,468
Egg plants, dozens	122
Gooseberries, quarts	11
Grapes, bushels	20 $\frac{1}{4}$
Hay, tons	18 $\frac{1}{2}$
Kohlrabi, bushels	55
Leek, barrels	32
Lettuce, heads.....	4,365
Melons, musk	2,584
Melons, water	7
Milk, quarts	22,501
Oyster plants, bushels.....	17
Onions, bushels	66 $\frac{1}{2}$
Okra, bushels	4 $\frac{1}{2}$
Potatoes, bushels	67 $\frac{1}{2}$
Peas, bushels	77 $\frac{1}{2}$
Parsley, bushels	74 $\frac{1}{8}$
Peppers, bushels	34 $\frac{3}{4}$
Parsnips, bushels	340 $\frac{1}{2}$
Pumpkins, barrels	134
Pears, bushels	3 $\frac{3}{4}$
Peaches, bushels	13 $\frac{1}{2}$
Radishes, bushels	877
Rhubarb, bunches	9,577
Sprouts, brussels, bushels.....	6 $\frac{3}{4}$
Spinach, barrels	131 $\frac{1}{2}$
Strawberries, quarts	2,561
Squash, barrels	151
Swiss chard, bushels.....	426
Raspberries, quarts	352
Turnips, bushels	270
Tomatoes, bushels	276
Tomatoes, green, bushels.....	30
Tomatoes, small, quarts.....	20
Tomatoes, bushels	153
Thyme, bushels	16 $\frac{1}{2}$

FARM STOCK

Horses	14
Cows	10
Heifers	2
Bulls	1

GENERAL INFORMATION DIRECTORY—MANHATTAN STATE
HOSPITAL, EAST

A. E. Macdonald, M. D. Superintendent

All official communications with regard to the Manhattan State Hospital, East, should be addressed to the superintendent.

Post-office address, Ward's Island, Station U, New York city.
Telephone, No. 1872 Harlem.

Accessible by steamer from foot of East One Hundred and Sixteenth street, 1 p. m.

Visiting days, Mondays, Tuesdays, Fridays and Saturdays.

Visiting hours, 1 to 3 p. m.

VISITING OF PATIENTS

Extracts from Regulations

"The superintendent shall regulate and determine the times at which patients may be visited by their friends; and no visitor shall be allowed to see a patient without his consent."

"Friends of patients will be allowed to see them when their condition admits of it, but each patient may only be visited once in two weeks, unless special permission is given by the superintendent, on account of the patient's illness, or for other sufficient reason."

"Visitors will not be admitted on Sundays, unless by special pass from the superintendent, and then only from 1 to 3 p. m."

"Visitors are expressly forbidden to furnish money, wine, liquor or tobacco to any inmate of the hospital, or to deliver to or receive from a patient any letter, parcel or package, without the knowledge and permission of the superintendent."

"No attendant shall receive any perquisite or present from any patient, or friend of a patient, or sell to, or buy anything from a patient."

"The physicians attached to the hospital will attend in the offices at the usual visiting hours, and will cheerfully and fully answer all questions addressed to them, as to the condition and

prospects of the different patients. Friends of patients are requested to apply to the physicians for information, and not the attendants, who are not qualified to judge of such matters. Letters of inquiry should be addressed to the superintendent, and will be promptly answered."

"Friends of patients should give notice of any change of residence, in order that they may be notified without delay in the event of the patient's death."

"Visits from others than relatives of patients will only be permitted when satisfactory evidence is presented that such visits have the sanction of the patient's nearest relative."

"Visits from committees of lodges or benevolent societies, made with the view of testing a patient's sanity, will on no account be permitted. The superintendent will certify as to the patient's condition whenever such certification is needed."

"Visitors of all kinds must first apply at the office of the superintendent, and are forbidden to enter the wards or other parts of the hospital buildings in any other way."

ADMISSIONS

The following rules must be observed in the removal of patients to the Manhattan State Hospital, East.

1. Patients must be in a condition of bodily cleanliness.
2. Patients must be provided with the following:
 - (a) One full suit of underclothing.
 - (b) One full suit of outerclothing, including headwear, boots or shoes.

Between the last day of October and the last day of March there shall be provided, in addition to the foregoing, a suitable overcoat for men patients and a suitable shawl or cloak for women patients; also gloves. Considering the great danger, always present, of the introduction of contagious or infectious diseases into institutions where large numbers of people are congregated, and to avoid, as far as possible, the introduction of such diseases by means of wearing apparel, the clothing referred to above must, in all cases, be new.

CORRESPONDENCE OF PATIENTS

Each patient is permitted to write to some relative or friend once in two weeks, and oftener, if necessary, in the discretion of the superintendent. In the case of patients unable from any cause to write, the superintendent directs some proper person to write for such patients at suitable intervals if they so desire.

All letters are forwarded at once, unless they are obscene, profane, illegible or too incoherent to be understood, and the postage is furnished by the hospital.

Letters detained for the reasons stated above are forwarded at once to the office of the State Commission in Lunacy.

Letters addressed to the Governor, Attorney General, judges of courts of record, district attorneys or the State Commissioners in Lunacy, are forwarded at once without examination.

116.5
115

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900	1,847	.....	1,847
Admitted during year ending Sept. 30, 1901...	733	.....	733
On original commitments:			
From residences.....	660	.....	660
By transfers from county houses.....	40	.....	40
By transfers from other institutions for insane.	33	.....	33
Total number under treatment during year.	2,580	.....	2,580
Daily average population	1,925	.....	1,925
Capacity of institution.....	1,500	.....	1,500
Discharged during the year:			
As recovered	116	.....	116
As improved.....	118	.....	118
As unimproved	90	.....	90
As not insane.. ..	5	.....	5
Died	284	.....	284
Whole number discharged during the year.....	613	.....	613
Remaining October 1, 1901	1,967	.....	1,967

Percent of ...

TABLE No. 2

October 1, 1900 to September 30, 1901

Date of opening.....	1871
Total acreage of grounds and buildings.....	125
Value of real estate, including buildings.....	\$1,630,055 40
Value of personal property.....	133,240 94
Acreage under cultivation.....	59½

Receipts during year, maintenance fund :

From State Treasury for maintenance on estimates	
1 to 12, inclusive.....	\$348,285 00
From reimbursing patients.....	5,468 52
From all other sources.....	9,854 27

Total receipts for maintenance.....	\$363,607 79
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Total receipts from State Commission in Lunacy	
for extraordinary improvements.....	\$22,993 30
Total receipts from manufacturing fund,.....	25,739 01

Disbursements during year for maintenance :

Estimate No. 1. For officers' salaries.....	\$22,594 77
Estimate No. 2. For wages.....	112,759 01
Estimate No. 3. For provisions and stores.....	111,320 71
Estimate No. 4. For ordinary repairs.....	6,015 31
Estimate No. 5. For farm and grounds.....	5,427 73
Estimate No. 6. For clothing.....	24,229 99
Estimate No. 7. For furniture and bedding ..	9,688 23
Estimate No. 8. For books and stationery.....	2,969 51
Estimate No. 9. For fuel and light.....	19,365 37
Estimate No. 10. For medical supplies.....	3,768 97
Estimate No. 11. For miscellaneous expenses...	24,473 32
Estimate No. 12. For transportation.....	754 65

Total disbursements, estimates 1 to 12, inclusive	\$343,367 57
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Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commissioner in Lunacy.....	\$22,993 30
Total disbursements during year, manufacturing fund.....	20,078 34
Remitted to State Treasurer, sundry receipts, Chapter 580, Laws 1899.....	5,729 41
<hr/> <hr/>	
Balances October 1, 1901:	
General maintenance fund.....	\$5,105 16
Manufacturing fund.....	5,660 67
<hr/> <hr/>	
Weekly per capita cost on daily average number of patients, estimates 1 to 12, inclusive.....	\$3 4208
<hr/> <hr/>	
Maximum rate of wages paid attendants:	
Men, per annum	\$420 00
Minimum rate of wages paid attendants:	
Men, per annum.....	240 00
<hr/> <hr/>	
Proportion of day attendants to average daily population.....	1 to 10
Proportion of night attendants to average daily population.....	1 to 48
Percentage of daily patient population engaged in some kind of useful occupation.....	47.79
Estimated value of farm and garden products during year.....	\$7,495 74
Estimated value of articles made or manufactured by patients during year.....	33,073 32
<hr/> <hr/>	

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	Year ending September 30, 1901—men	Inherited pre- disposition— men	Unascertained
Moral:			
Adverse conditions (such as loss of friends, business troubles, etc.).....	25	10	1
Mental strain, worry and over- work (not included in above).....	72	13	3
Religious excitement.....	2	1	.....
Love affairs (including seduc- tion) ..	9	1	.....
Fright and nervous shock.....	19	4	1
Physical:			
Intemperance	146	29	5
Sexual excess.....	4	.....	.....
Venereal diseases.....	51	5	1
Masturbation	32	4	2
Sunstroke.....	14	6	1
Accident or injury.....	35	8	2
Fevers	3	1	.....
Privation and overwork.....	21	6	2
Epilepsy	28	7	3
Diseases of skull and brain.....	7	2	.....
Old age.....	22	2	.....
Epidemic influenza	5	1	.....
Abuse of drugs.....	1	1	.....
Loss of special sense.....	1	.....	.....
Uraemic poisoning.....	6	1	.....
All other bodily disorders and ill health.....	40	7	5
Heredity	38	.....	.....
Congenital defect.....	2	.....	.....
Unascertained	145	.....	.....
Not insane.....	5	.....	.....
Total	733	109	26

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute.....	74	23	17	1,293	281	295
Mania, recurrent.....	5	.....	.....	34	5	2
Mania, chronic.....	11	.....	7	163	4	87
Melancholia, acute.....	254	90	35	3,404	714	428
Melancholia, simple.....	.....	.....	.....	60	.....	.....
Melancholia, chronic.....	69	.....	23	662	6	176
Alternating (circular) insanity.....	.....	.....	.....	43	.....	.....
Paranoia.....	9	.....	.....	12	.....	.....
General paralysis.....	137	.....	86	1,855	.....	1,275
Dementia, primary.....	12	.....	.....	497	70	99
Dementia, terminal.....	122	.....	101	1,245	.....	1,030
Epilepsy with insanity....	23	.....	15	329	.....	155
Imbecility with maniacal attacks.....	7	3	.....	259	3	34
Idiocy.....	.....	.....	.....	7	.....	3
Not insane*.....	5	.....	.....	13	.....	.....

* Includes cases of alcoholism, drug habit, etc.

Total = 733

G.P. = 11.73%

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901		SINCE OCTOBER 1, 1888	
	Duration previous to admission—men	Period under treatment—men	Duration previous to admission—men	Period under treatment—men
Under one month.....	37	2	372	34
One to three months.....	39	15	226	263
Three to six months.....	14	35	70	279
Six to nine months.....	7	22	38	184
Nine months to one year.....	.....	13	10	111
One year to eighteen months...	7	23	23	101
Eighteen months to two years.	.....	3	10	45
Two to three years.....	3	1	20	37
Three to four years.....	2	1	4	13
Four to five years.....	.....	1	2	6
Five to ten years.....	2	.....	4	9
Ten to twenty years.....	.....	.....	1	1
Unascertained	5	.....	303	.....
Total	116	116	1,083	1,083

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases :						
Typhoid fever.....				2		
Smallpox.....				1		
Erysipelas.....	1			6		
Septicemia and pyemia.....				40		
Malarial affections.....				1		
Tuberculosis.....	24			27		
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and oesophagus.....				2		
Diseases of the stomach.....				3		
Diseases of the intestines..	36			264	2	266
Diseases of the liver.....	2			22		
Diseases of the peritoneum.....				9		
Diseases of the respiratory system :						
Diseases of the nose and larynx.....				1		
Diseases of the bronchi....	4			48		
Diseases of the lungs.....	38			738		
Diseases of the pleura.....	1			9		
Diseases of the circulatory system :						
Diseases of the pericardium.....				2		
Diseases of the heart.....	35			291		
Arterio-sclerosis.....	27			55		
Aneurism.....	1			5		
Diseases of the blood and ductless glands :						
Diseases of the genito-urinary system.....	36			250		
Diseases of the nervous system :						
Diseases of the spinal cord..	4			19		
Diseases of the meninges..	3			60		
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions).....	11			180		

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the nervous system— (continued) :						
Functional nervous diseases (paralysis agitans, chorea, eclampsia, hysteria, neurasthenia)	1	.....	.....	1	.....	.....
Epilepsy	6	.....	.....	149	.....	.....
Mental diseases :						
Exhaustion of acute mental disease.....	3	.....	.....	188	.....	.....
Exhaustion of chronic mental disease.....						
General paralysis of the insane	46	.....	.....	1,131	.....	.....
The intoxications; heat-stroke; obesity :						
Heat-stroke.....	2	.....	.....	3	.....	.....
Debility of old age.....	.....	.....	.....	22	.....	.....
Accident .....	.....	.....	.....	10	.....	.....
Suicide.....	3	.....	.....	25	.....	.....
Surgical and gynecological diseases and diseases of the skin.....	.....	.....	.....	3	.....	.....
Malignant new growths of cancer .....	.....	.....	.....	15	.....	.....
Total	284	.....	.....	3,582	2	3,584

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	Year ending September 30, 1901—Men	Since October 1, 1888—Men
Paternal branch.....	38	353
Maternal branch.....	37	314
Paternal and maternal branches.....	1	41
Collateral branches.....	33	505
No hereditary tendency.....	574	5,993
Unascertained	50	2,670
Total	733	9,876

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	Year ending September 30, 1901—Men	Since October 1, 1888—Men
Single	382	5,161
Married	303	3,812
Widowed	45	759
Divorced	1	16
Unascertained	2	128
Total	733	9,876

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	Year ending September 30, 1901—Men	Since October 1, 1888—Men
Collegiate	15	205
Academic	4	148
Common school	321	3,335
Read and write	306	4,638
Read only	13	187
No education	49	689
Unascertained	25	674
Total	733	9,876

TABLE No. 11
Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	DURATION PREVIOUS TO ADMISSION		PERIOD UNDER TREATMENT	DURATION PREVIOUS TO ADMISSION		PERIOD UNDER TREATMENT
	Men	Women		Men	Women	
Under one month	37	.....	.....	530	.....	.....
One to three months	52	.....	.....	541	.....	.....
Three to six months	18	.....	.....	238	.....	.....
Six to nine months	33	.....	.....	240	.....	.....
Nine months to one year	8	.....	.....	96	.....	.....
One year to eighteen months ..	33	.....	.....	251	.....	.....
Eighteen months to two years ..	9	.....	.....	75	.....	.....
Two to three years	23	.....	.....	175	.....	.....
Three to four years	9	.....	.....	100	.....	.....
Four to six years	15	.....	.....	81	.....	.....
Six to ten years	9	.....	.....	63	.....	.....
Ten to twenty years	2	.....	.....	61	.....	.....
Twenty years and over	5	.....	.....	26	.....	.....
Unascertained	31	.....	.....	1,106	2	.....
Total	284	.....	.....	3,582	2	3,584
Average duration of insane life (giving years and tenths)			3.5			3.5

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	Year ending September 30, 1901—men	Since October 1, 1888—men
From ten to fifteen years.....	2	30
From fifteen to twenty years.....	36	515
From twenty to twenty-five years.....	85	1,210
From twenty-five to thirty years.....	107	1,399
From thirty to thirty-five years.....	109	1,465
From thirty-five to forty years.....	109	1,386
From forty to fifty years.....	142	1,874
From fifty to sixty years.....	88	1,092
From sixty to seventy years.....	36	600
From seventy to eighty years.....	16	212
From eighty to ninety years.....	2	62
From ninety years upwards.....	.....	13
Unknown.....	1	18
Total.....	733	9,876

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years.....	8	.....	8	71	.....	71
From 20 to 30 years.....	49	.....	49	369	.....	369
From 30 to 40 years.....	30	.....	30	332	.....	332
From 40 to 50 years.....	16	.....	16	202	.....	202
From 50 to 60 years.....	8	.....	8	68	.....	68
From 60 to 70 years.....	5	.....	5	38	.....	38
From 70 to 80 years.....	.....	.....	.....	1	.....	1
Over eighty years.....	.....	.....	.....	2	.....	2
Total.....	116	.....	116	1,083	.....	1,083

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years.....	4	.....	.....	51	.....	.....
From 20 to 25 years.....	12	.....	.....	166	.....	.....
From 25 to 30 years.....	26	.....	.....	270	.....	.....
From 30 to 35 years.....	30	.....	.....	415	.....	.....
From 35 to 40 years.....	46	.....	.....	551	.....	.....
From 40 to 50 years.....	77	.....	.....	849	.....	.....
From 50 to 60 years.....	50	.....	.....	610	2	.....
From 60 to 70 years.....	25	.....	.....	409	.....	.....
From 70 to 80 years.....	11	.....	.....	195	.....	.....
From 80 to 90 years.....	3	.....	.....	51	.....	.....
From ninety years and upwards .....	.....	.....	.....	15	.....	.....
Total	284	.....	.....	3,582	2	3,584

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients admitted during the year ending September 30, 1901

Duration of Insanity	Men
Under one month	181
One to three months	106
Three to six months	74
Six to nine months	28
Nine months to one year	72
One year to eighteen months	14
Eighteen months to two years	48
Two to three years	24
Three to four years	12
Four to five years	28
Five to ten years	26
Ten to fifteen years	12
Fifteen to twenty years	7
Twenty to thirty years	1
Not insane*	5
Unascertained	95
Total	733

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

Period of Residence	Men
Under one month	57
One to three months	83
Three to six months	125
Six to nine months	126
Nine months to one year	92
One year to eighteen months	135
Eighteen months to two years	136
Two to three years	199
Three to four years	134
Four to five years	117
Five to ten years	379
Ten to fifteen years	179
Fifteen to twenty years	119
Twenty to thirty years	85
Not insane*	1
Total	1,967

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	Year Ending Sept. 30, 1901— men	Since October 1, 1888—men
Professional :		
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.	20	318
Commercial :		
Bankers, merchants, accountants, clerks, sales- men, shopkeepers, shopmen, stenogra- phers, typewriters, etc.	135	1,642
Agricultural and Pastoral :		
Farmers, gardeners, herdsmen, etc.	24	201
Mechanics, at out door vocations :		
Blacksmiths, carpenters, engine-fitters, saw- yers, painters, police, etc.	152	2,279
Mechanics, etc., at sedentary vocations :		
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.	146	1,910
Domestic service :		
Waiters, cooks, servants, etc.	59	717
Educational and higher domestic duties :		
Governesses, teachers, students, housekeepers, nurses, etc.	8	74
Commercial :		
Shopkeepers, saleswomen, stenographers, type- writers, etc.		16
Employed in sedentary occupation :		
Tailoresses, seamstresses, bookbinders, factory workers, etc.		
Miners, seamen, etc.	11	45
Prostitutes		
Laborers	128	1,903
No occupation	47	533
Unascertained	3	238
Total	733	9,876

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	Year ending September 30, 1901—men	Since October 1, 1888—men
Africa .....	.....	3
Armenia	1	1
Algeria .....	.....	3
Austria	27	225
British possessions.....	3	26
Bavaria.....	1	8
Belgium .....	.....	9
Bohemia	4	56
Bulgaria .....	.....	1
Canada	5	96
China	3	33
Cuba .....	.....	5
Denmark.....	5	34
England	24	361
Egypt	1	2
Finland.....	1	18
France.....	8	166
Germany.....	97	1,765
Greece.....	2	10
Holland.....	2	24
Hungary.....	12	132
Ireland	115	1,802
Italy	37	404
Japan .....	.....	2
Malta.....	.....	4
Mexico .....	.....	3
Norway.....	1	40
Roumania.....	3	17
Russia and Poland.....	57	566
South America.....	.....	6
Scotland	7	111
Spain.....	1	13
Sweden	8	134
Switzerland	7	80
Turkey .....	.....	20
United States.....	295	3,585
Sandwich Islands.....	1	1

Table No. 18—(Concluded)

NATIVITY	Year ending September 30, 1901—men	Since October 1, 1888—men
U. S. of Columbia.....		.....
Wales.....		3
West Indies.....	2	37
Unascertained.....	3	40

Of the total number admitted since the 1st of October, 1883, the parents of 89.1 per cent were both of foreign birth.

In 2.35 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 1.25 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients admitted during the year ending September 30, 1901

Counties	Public
Kings.....	1
New York.....	724
Richmond.....	5
Westchester.....	1
Non-residents of State.....	2
Total.....	733

TABLE No. 20

Showing the residence by counties and classification of patients remaining under treatment September 30, 1901

Counties	Public
Kings.....	4
New York.....	1,960
Richmond.....	3
Total.....	1,967

SPECIAL TABLE No. 1

Medical Service, September 30, 1901

Number of physicians.....	12
Ratio of physicians to patients.....	1 to 160.417
Annual per capita cost of medical service.....	\$10.033

SPECIAL TABLE No. 2

Employees, September 30, 1901

Total number of employees.....	333
Ratio of all employees to patients.....	1 to 5.780
Ratio of attendants to patients.....	1 to 8.262
Per capita cost of all employees.....	\$58.357

SPECIAL TABLE No. 3

October 1, 1900, to September 30, 1901

Recoveries

Percentages:

On number admitted	15.83
On average daily population	6.03
On whole number treated.....	4.50
On number discharged	18.92

SPECIAL TABLE No. 4

Deaths

Percentages:

On number admitted	38.74
On average daily population	14.75
On whole number treated	11.01
On number discharged	46.33

SPECIAL TABLE No. 5

Statement Showing Average Purchase Price and Per Capita Cost of
Staple Articles of Consumption, for the Period from October 1, 1900,
to September 30, 1901

	Average price	Per capita cost
Meats, fresh, per pound.....	\$0.0686	\$12.8841
Poultry, per pound .....	.1116	.3659
Wheat flour, per barrel	3.3435	4.6232
Butter, per pound .....	.2076	8.4361
Cheese, per pound .....	.0920	.9166
Milk, condensed, per quart .....	.1220	6.0369
Milk, cows,' per quart .....	.0408	.1542
Eggs, per dozen .....	.1637	2.7633
Tea, per pound .....	.2413	.8009
Coffee, per pound .....	.1180	1.5878
Sugar, per pound.....	.0538	2.8856
Liquor, distilled, per gallon	2.0500	.0220

Statement Showing Cost of Coal Consumed by Manhattan State Hospital,
East, for the Year Ending September 30, 1901

Total annual cost	\$14,786.03
Annual per capita cost	7.6811
Number of tons of coal consumed	6,769
Average purchase price	\$2.197

SECOND ANNUAL REPORT
OF THE
MANAGERS
OF THE
Manhattan State Hospital, West
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

MANHATTAN STATE HOSPITAL, WEST

BOARD OF MANAGERS

HENRY E. HOWLAND	GEORGE E. DODGE
ELEONORA KINNICUTT	JOHN McANERNEY
ISAAC N. SELIGMAN	LOUISA PIERPONT SATTERLEE
HENRY H. HOLLISTER	

OFFICERS OF THE BOARD

HENRY E. HOWLAND.....	President
GEORGE E. DODGE.....	Secretary
WILLIAM H. KIMBALL.....	Treasurer

NON-RESIDENT MEDICAL OFFICERS

Board of Consulting Physicians and Surgeons

AUSTIN FLINT, M. D.	WILLIAM H. ROSS, M. D.
WHITMAN V. WHITE, M. D.	ALLAN McLANE HAMILTON, M.D.
WALTER R. GILLETTE, M. D.	JOSEPH D. BRYANT, M. D.
EDW. G. JANEWAY, M. D.	WILLIAM H. THOMSON, M. D.
EDWARD D. FISHER, M. D.	FREDERICK PETERSON, M. D.
BERNARD SACHS, M. D.	

RESIDENT MEDICAL OFFICERS

E. C. DENT, M. D.....	Superintendent
-----------------------	----------------

First Assistant Physician

HERMAN C. EVARTS, M. D.

Second Assistant Physician

GEORGE B. CAMPBELL, M. D.

Assistant Physicians

WILLIAM B. MOSELEY, M. D.	ARTHUR C. DELACROIX, M. D.
REUBEN F. MONETTE, M. D.	HUNTER A. BOND, M. D.
HORATIO G. GIBSON, M. D.	FRANK H. MAGNESS, M. D.
LOUIS WALTHER, M. D.	

Junior Physician
ANTON HEGER, M. D.

Woman Physician
ANNA E. HUTCHINSON, M. D.

Medical Internes
CHAS. P. FRISCHBIER, M. D. W. A. CROFOOT, M. D.

Purchasing Steward
F. A. WHEELER

Resident Steward
LEWIS WEBB

Matron
ANNIE F. JESTLEY

REPORT OF MANAGERS

To the State Commission in Lunacy

In compliance with the requirements of the Insanity Law the managers of the Manhattan State Hospitals beg to herewith present their sixth annual report, for the year ending September 30, 1901.

The treasurer's report and the superintendents' reports are also incorporated in the report of the managers.

STANDING AND SPECIAL COMMITTEES

The following committees have been in active operation during the past year:

Finance Committee—Henry H. Hollister, chairman; John McAnerney and Isaac N. Seligman.

House and Visiting Committee—Eleonora Kinnicutt, chairman; Louisa Pierpont Satterlee and George E. Dodge.

Building Committee—Henry H. Hollister, chairman; Eleonora Kinnicutt and George E. Dodge.

The members of the board, and particularly of the visiting committee, have made regular inspections of the various branches of the hospital, and have reported as to these inspections at the regular monthly meetings of the board.

Henry H. Hollister has paid as usual special attention to and has great interest in the work on the new colony at Central Islip, and has made constant reports to the board as to the progress of the work there.

CONDITION OF THE INSTITUTION

With one exception the general condition of the buildings connected with the hospital is good. The exception referred to is that of the east building of the East Hospital, which is at present occupied by 640 men, and which is to be occupied during the month by 500 women from Blackwell's Island. This east

building is still sadly out of repair and is not in a safe or sanitary condition for these inmates.

The board are greatly in hopes that necessary repairs to this building will be allowed by the Commission. The board do not ask for any extravagant repairs, but simply those that would make the building safe and reasonably comfortable for these inmates.

There is now in process of erection at the West Hospital two new dining-rooms. When these are finished they will add greatly to the comfort and convenience of the patients.

At the Hospital, East, a new kitchen is being erected. This kitchen was very much needed and will be of great service.

The improvements on the new colony at Central Islip are progressing favorably, and when the entire colony is finished it will be one of the most complete and satisfactory hospitals for insane in the whole State.

WORKING FORCE OF THE HOSPITAL

The working force of the hospital, including all the physicians, employees, nurses and attendants of various grades, has been quite satisfactory during the year, and the training school particularly has shown very satisfactory results.

GENERAL MANAGEMENT OF THE HOSPITALS

The board beg to report that the general management of the hospitals during the past year, under the care of the three superintendents, has been most satisfactory. The employees and junior officers have kept steadily at their work, and the whole condition of the hospitals in cleanliness and in general efficiency has been of the very best. Each of the three superintendents has worked very hard and has displayed a great desire for the very best welfare of the hospital under his control.

For the board of managers.

GEO. E. DODGE

Secretary

SUPERINTENDENT'S REPORT

NEW YORK, *October 1, 1901*HONORABLE HENRY E. HOWLAND, *President, etc.*

Sir.—The second annual report of the Manhattan State Hospital, West, for the fiscal year ending September 30, 1901, is herewith respectfully submitted.

MOVEMENTS OF POPULATION

Following are statements showing movements of population:

	Male	Female	Total
Number of insane in care of hospital October 1, 1900.....	199	2,533	2,732
Admitted during ensuing year...	9	787	796
	<hr/>	<hr/>	<hr/>
Total number under treatment	208	3,320	3,528
	<hr/>	<hr/>	<hr/>
Number of patients discharged during the year.....	5	454	459
Number of patients died during the year.....	3	230	233
	<hr/>	<hr/>	<hr/>
Total	8	684	692
	<hr/>	<hr/>	<hr/>
Number of patients remaining September 30, 1901.....	200	2,636	2,836
	<hr/>	<hr/>	<hr/>
Number of insane in care of hospital October 1, 1900:			
Ward's Island.....	199	1,718	1,917
Blackwell's Island		815	815
	<hr/>	<hr/>	<hr/>
Total	199	2,533	2,732
	<hr/>	<hr/>	<hr/>

Number of insane in care of hospital September 30, 1901:

Ward's Island.....	200	1,806	2,006
Blackwell's Island .....	.....	830	830
Total	200	2,636	2,836

ADMISSIONS

Situated as we are, in a cosmopolitan city and in the most populous district in the country, our admissions are consequently much larger than those of other hospitals of similar character. A large percentage of these admissions are of foreign birth, and, coming from the most crowded tenement districts, many of them are in an extremely wretched bodily condition and suffering from various physical complications in addition to their mental disorder.

During the past year our admissions were materially decreased by the rejection of thirty-two patients committed to this hospital from the reception pavilion for the insane at Bellevue Hospital and one from Staten Island, who were not suitable nor proper cases for care and treatment in a hospital for the insane, or were aliens and non-residents. A large percentage of these patients were dotards, having passed beyond the period of probable restoration, and would only remain a charge upon the State the rest of their natural lives. The tendency not only of relatives but of county authorities to commit the aged whose mental faculties have been impaired, not through any morbid state of the body, but simply as a result of physiological decay, unfortunately exists. As this condition is frequently complicated by acute insanity, it is a matter that requires great care and attention in exercising the authority given the superintendent by the "statute," to prevent the hospital from being overcrowded with this class of patients.

New York, as it seems, is the Mecca for the insane not only of other countries but of many States in the Union. These unfortunates are, from time to time, committed to this hospital, and we are frequently compelled to reject the alien and non-

resident insane. In many instances we are unable to establish their residence before they are admitted to this hospital; and again, their condition is such that they are in great need of immediate hospital care. In these instances every effort is made to ascertain their legal residence, and as soon as their condition permits they are returned to the State from which they came. Insane aliens are deported by the Federal authorities when the fact that they were insane prior to their coming to this country is established.

As a large proportion of our admissions come through Bellevue Hospital, where a reception pavilion for the insane is maintained by the county authorities, and as the distance from our hospital to the reception pavilion is considerable, a great deal of time and expense could be saved and many annoyances obviated by establishing a reception pavilion for the insane more convenient and accessible to this hospital.

During the current year 753 patients were admitted to this hospital from the reception pavilion at Bellevue Hospital, 10 patients were admitted from their homes and 33 patients by transfer from other institutions for the insane. Of this number 163 were over 50 years of age, 289 in feeble condition, 195 had attempted suicide or manifested marked suicidal tendencies, and 69 had attempted homicide or manifested marked homicidal tendencies.

CASES REJECTED

During the year altogether 32 cases have been rejected at Bellevue Hospital and one at New Brighton, Richmond county, Staten Island, making a total of 33 cases rejected for the following reasons:

First—As not insane within the meaning of the statute, and therefore unsuitable for care and treatment in a State hospital for the insane.

Second—As being alien or non-resident.

Of the total number rejected, eight were afterwards admitted. In most instances these rejected cases were sent to the New

York city almshouse or to one of the city hospitals on Blackwell's Island, where they developed symptoms which prevented their being longer cared for in those institutions, hence their recommitment and acceptance by this hospital.

ALIENS AND NON-RESIDENTS

The total number of aliens admitted was ten. Of this number four were transported to their homes in Europe, one going to Germany, one to France, one to Italy and one to Austria, each accompanied by a hospital nurse, and one was returned to England by the immigration department.

The number of admitted non-residents was seven, of whom one was sent to her home in Chicago and one to St. Louis at State expense.

The number discharged shortly after admission as "not insane" was six.

The number of other cases sent to their friends at State expense was three.

The number of recovered patients who were assisted at the time of their discharge was twelve. One patient who was discharged improved also received assistance from the hospital.

It has been customary when patients recovered who had no friends or home, and were discharged, to give them about \$5 to enable them to live at some home or boarding house until they could secure employment.

RECOVERIES

It is gratifying to report that the ratio of recoveries has been much increased during the past year. Without underestimating the value of continued, closely applied medical work, I would say that our facilities for bringing about the desired results are superior to any before experienced in the history of the hospital.

The patients received at this hospital are in the great majority of cases very poor, and come from the tenement-house districts. Their friends and relatives are rarely in any better circumstances. These friends are often very persistent in desiring the discharge of a patient before she is in a proper condition men-

tally to leave the hospital, and frequently refuse to be guided by the advice of the medical officers, hence patients are sometimes discharged who, in the judgment of the physicians, should longer continue under the care and treatment of the hospital. Many who leave the hospital where they have been so well fed, clothed, and housed, have received medical attention, and have recovered or became very much improved, go out into the world to live under the former unfavorable conditions, are unable to stand the strain, and as their friends may not be in a position to give them proper care and protection, they sooner or later drift back to the hospital, where under the comfortable conditions of hospital life and treatment they show improvement. These outside conditions of insufficient food and clothing, poverty and the unremitting struggle necessary in order to live cannot be prevented, but all these matters should be taken into account, and due credit given the hospital for the work accomplished under such circumstances.

The percentage of recoveries on admissions was 26.50; on the average daily population, 7.57; on the whole number treated, 5.98; on number discharged, 45.96. →

DEATHS

The total number of deaths was 233 (3 men, 230 women). The percentage on number admitted was 29.27; on the average daily population, 8.36; on the whole number treated, 6.60; on number discharged, 50.76.

CASUALTY

Patient Anna Nyegard, admitted August 10, 1900, committed suicide October 3, 1900. About 6 o'clock in the morning the body of this patient was found by the charge nurse suspended from the window guard of her room by a cord made from pieces of bed ticking tied together. The body was immediately cut down and artificial respiration employed and the night officer summoned. He arrived soon after and found the body warm but life extinct. It appears that soon after 5 o'clock this patient visited the toilet, and upon returning to her room asked the

nurse what time it was, and if she could be allowed to remain up. The nurse told her the hour, and that she could not remain up until the appointed time for rising. The patient attempted to take her clothing into her room to dress herself, but was told a second time by the nurse that she would not be allowed out of bed. She then put her clothing down and went back to bed quietly. Nothing strange was observed in her manner or conduct at the time, and no suspicion was then aroused. This patient had been kept under constant observation and had begun to improve, manifesting interest in her surroundings and assisting in light work during the day. I would add that, in addition to the patient's mental disease, she suffered from an organic heart lesion and was much debilitated. The case was referred to the coroner, and the hospital was exonerated from all blame and censure in the matter.

This is the only fatal accident that occurred during the year.

SMALLPOX

Last November a serious epidemic of smallpox developed in the tenement-house district in New York. As the disease prevailed in the locality from which many of our patients are admitted, stringent measures were taken as soon as the epidemic was made known to prevent its introduction into the hospital. Our patients were thoroughly protected by vaccination, all clothing provided patients by their friends was sterilized, and the visits of relatives who were known to reside in the infected districts were curtailed to as great an extent as possible.

In December a patient who had been an inmate of the hospital for several months prior to the outbreak in the city developed the disease, and was at once quarantined and removed to the smallpox hospital, North Brothers Island. Several days later another patient in the same ward developed the disease and was also removed. As one case had marked suicidal tendencies and was disturbed, the city authorities refused to accept the responsibility of her care. Two of our nurses cheerfully volunteered their services without any inducement of additional

remuneration and faithfully nursed both cases during their entire stay in the smallpox hospital. This thoroughly demonstrated their unselfish interest in and devotion to the profession which they honor. Subsequently both cases were returned to the hospital. The source of the contagion could only be attributed to the visit of the relative to the patient who first developed the disease. By strict quarantine measures the disease was fortunately limited to these two cases.

PHTHISIS

One hundred and three cases of phthisis have been reported to the board of health since our last annual report.

This would seem at first rather a large number, but when we consider the fact that the great majority of our cases come to us from the crowded and cheap districts of New York, where it is impossible for the unfortunates to enjoy the essentials of good hygiene, and from a class of uneducated people who do not appreciate the necessity of living under healthy conditions, and too from a city where the infection is very great, the number seems comparatively small. While many of these do not come to us with active pulmonary signs, yet it is fair to suppose that the mischief was planted there before their admission to the hospital only to be lighted up when their mental troubles have progressed to the extent of destroying their health balance, for nearly all these cases, whether young or old in years or recent admissions, with one single exception, were of the progressive type of mental disease, or at least with very unfavorable prognoses. And further, when we consider the good sanitary and hygienic condition of our State institutions and the practice of complete segregation of even suspected cases of lung tuberculosis, it would be difficult to imagine that we were at fault in any way in the dissemination of the disease among the more healthy class of our charges. On the contrary, a number of our tubercular patients are each year restored to good physical health and others with their lung troubles completely arrested.

As formerly, the tubercular class of our patients is kept abso-

lutely separate from the rest of the population, and too with the recent additions to the building where our consumptives are kept we are in a great measure able to keep together the non-infectious, as well as the only suspected cases, for their own benefit as well as that of others.

Realizing fully the great danger of tubercular patients to themselves in the way of reinfection from carelessness with their expectorations, etc., thereby baffling all attempts towards arresting and curing their disease, the greatest precautions are taken in the line of disinfection and in teaching these unfortunate people, wherever their mental condition will permit of their being taught, how much they can really help themselves. In the more demented class, where they are unable to appreciate the value of being careful with their expectorations, it is surprising to find that with perseverance on the part of intelligent nursing these can readily be made to form the habit of expectorating in cups or cloths provided for them instead of upon their own linen, that of the beds, and upon the floors, etc. Knowing that the chief mode of infection and reinfection of the disease is through the sputum, the utmost care is taken in handling and disinfecting this element of their morbid process—spit cup containing turpentine or creoline solutions, while in some cases spit cloths are provided for the bed cases. The cloths are destroyed daily, and the cups are treated with the same care. The patients, when sitting upon the lawns or walking upon the exercising grounds, take their cloths or cups with them and use them as faithfully as when upon the wards, not spitting upon the ground and thereby trespassing upon the good health of others.

Quite recently we have added to the consumptive building a splendidly appointed and exposed sun room, the upper tier of which is used as a dormitory where the incipient and more favorable cases are allowed to sleep, and on account of its admirable construction the maximum amount of fresh-air circulation is possible. Here the night temperature during winter will be but little different from that out of doors. The lower tier of the

sun room will be used as a day room for those who are up and about, when it is too cold and inclement for them to be out of doors. By this arrangement it will be seen that these people will be kept from the direct and stimulating sun rays only while at their meals. Since the out of door life is the best measure that can be offered for the relief of this disease, we are now able to encourage this to the fullest possible extent. In the line of "specific" remedies we have, like others, accomplished nothing beyond being persuaded that the measure is yet unknown that will have any distinct effect in staying tubercular processes in the lungs. There are many new remedies proposed for those suffering from tuberculosis which do in some favorable cases seem to prolong life, such as the various serums, the antitoxines as also the many physiological and biological products. What direct effect these agencies may have upon the tubercle bacillus, or what metabolic conditions they may engender, have not been sufficiently clinically demonstrated to ascribe to them any good results that could not be otherwise obtained. We simply give them plenty of fresh air, good wholesome food, three good meals a day when they can take them, correct their anaemia and stomach and intestinal disorders in just exactly the same way and with the same remedies as we would in any other disease where such conditions might prevail. Having a good Roentgen ray machine in the hospital, we have been largely aided by this in making diagnoses in incipient cases, and from time to time noting the progress of the lung condition in others.

TREATMENT

The large number of patients coming under our care and the different conditions existing in each individual case preclude the possibility of a general plan of treatment. As each pathological condition must be considered in its bearings upon the particular case in which it is found, it is essential that treatment should be individualized to as great an extent as possible. The necessity for early hospital care and treatment cannot be too

strongly emphasized. The large majority of our patients are those who constitute the chronic and unfavorable class, and have not received the care offered them by a hospital of this kind until their delusions and hallucinations have become firmly fixed and there is more or less permanent impairment or deterioration of the central nervous system, rendering the problem more difficult and the prognosis unfavorable and gloomy.

It is generally admitted that insanity is merely a symptom with a physical basis, and may be referred to any of the tissues or organs of the body; consequently the importance of a careful and thorough examination, both physical and mental, in each individual case in order to determine any existing or exciting morbid conditions and to outline a rational plan of treatment.

A large number of acute insane come to us suffering from extreme mental depression or excitement. We frequently find them depleted physically, the reserve energies of the body exhausted, the secretions diminished or suppressed, and their condition is one that calls for immediate and active treatment. Our efforts are first directed to arresting the waste of body tissue, restoring losses already sustained, and reestablishing the physiological functions of the body. In these conditions diet, intestinal antisepsis, rest in bed and massage are important agents. I have found that in melancholia with stupor, or in mania with delirium, lavage of the stomach and the lower intestinal tract with sterilized water is of great benefit. In some cases a normal saline solution is used, allowing a certain portion to remain in the stomach and intestines to be absorbed.

The use of sedatives and hypnotics is to a great extent supplanted by the employment of hydropathic procedures and daily out-door exercise. In certain cases we find that such hypnotics as chloral, sulfonal and trional are of service. In cases of delirium, hyoscine-hydrobromate administered hypodermatically in small doses is of use in relieving the fury, but I am unable to ascribe to hyoscyamus or its alkaloids any curative qualities.

HYDRIATICS

At a small expense our engineer and his staff have constructed several hydriatic appliances on our reception and acute wards, similar to those used in the establishment of Dr. Simon Baruch of New York city, the pioneer in this country in hydrotherapy. In the reception wards 26-27, where hydrotherapy is extensively employed, we have a fairly complete and satisfactory equipment consisting of hot air and vapor cabinets, spray, sitz and full baths, also perineal and Scotch douches. The separate rooms off the wards enable us to employ warm and cold packs to a great advantage. The results obtained from these agents are most gratifying, and warrant me in heartily commending their use.

DIET

The diet of the acute insane is one of the most important and difficult problems which we are called upon to deal with, and one that requires constant care and vigilance on the part of the medical officers to insure its proper distribution and administration. Since the occupation of our new detached building, with its modern kitchen and congregate dining-room, a great many difficulties have been overcome. Special attention is given to the preparation of the diet for the acute insane by a woman chef, a graduate of Drexel Institute, who is assisted on the acute wards by nurses who are skilled in the preparation of foods for the sick. We find in the acute insane not only anorexia, but also a lack of desire for food, due entirely to intense mental confusion and preoccupation.

Again we find the positive refusal of food, the result of delusions or hallucinations. In these cases, if all other means have been tried and proved unsuccessful, the enforced administration of nourishment becomes necessary. This is easily accomplished by the use of the naso-stomach tube, preferably placing the patient in the recumbent position. The frequency of forced feeding is largely governed by the physical condition of the patient. I am glad to say, however, that this method of feeding is not resorted to as often as formerly, and this may be

explained by the presence on the acute wards of a large number of trained nurses—one of the benefits derived from our training school for nurses.

Chemical and microscopical examinations of the stomach contents are frequently made in cases of pronounced malnutrition, in order to determine a suitable diet and guide us in our treatment. The importance of this procedure cannot be overestimated.

ELECTRICITY

Our static machine continues to give satisfaction, and the application of this form of electricity has been found to be very useful in cases of mental depression, especially where there are evidences of approaching dementia with disturbances of the circulatory and digestive systems. A large number of cases have received systematic treatment during the year, and in many instances marked mental and physical improvement has followed its use, thoroughly establishing the clinical value of this agent. It is also of value where there are pronounced neurasthenic tendencies with persistent insomnia. The galvanic and faradic currents are also employed to a certain extent in selected cases. The X-ray continues to be of service in establishing diagnoses.

MASSAGE AND SWEDISH MOVEMENTS

These agents are quite extensively employed in combination with rest in bed treatment, and are applied by a detailed nurse who is trained and skilled in the application of these therapeutic measures.

COLOR TREATMENT

We have continued to make observations on the effect of color in the treatment of the acute insane, using separate rooms painted throughout with the principal primary hues. The rooms used are located on a ward where there are many other rooms of similar size for the acute cases of the disturbed class. Since to carry out this experiment with color alone as a therapeutic

agent it would be necessary to have a separate building apart from all other patients so that those treated will not be allowed to disturb a whole ward in cases where there is great excitement, and on the other hand, so that these selected cases themselves shall not be unnecessarily influenced by their neighbors who are not being treated in this way, and as it would require an extra detailed force of nurses to care for those so treated, we can only speak of this procedure thus far in the light of an adjunct or auxiliary coupled with other modes of treatment such as hydriatics, massage, counter-irritation, mild sedation, etc., or such other special treatment as the case may require.

My observations, with the means at my command to carry out this treatment, enable me to say only this, that with cases of melancholia I have not detected any remarkable beneficial effects, especially where there is intense prolonged mental concentration. I am clearly of the belief that these cases should be subjected to great diversion—not to be allowed to remain surrounded by any one atmosphere of color or anything else, but that they should go about, out walking, sailing, driving, attend amusements, be given a kaleidoscopic—an ever changing—life, so to speak; diversions proper to charm the grieved spirit and substitute agreeable impressions for those which habitually beset it. This with light tasks not to the degree of fatigue.

With mania, where there is extreme excitement and confusion, isolation and quietude are very necessary. A room of a color such as blue or violet may assist in soothing this perturbation and diminishing its intensity. It is quite difficult to say what the influence of this agent alone is on the prognosis of this type.

GENERAL IMPROVEMENTS

During the past year much work has been done in the way of general improvements. There is considerable work now under way which will not be completed before the end of the fiscal year. In regard to this I would mention the following:

A new dining-room adjoining the kitchen near the Verplanck

building is being constructed, which is intended to accommodate about 400 patients and will enable us to dispense with the three dining-rooms now in use, which are entirely inadequate and unsuitable for such purpose. These old dining-rooms will be devoted to other purposes as soon as the new dining-room is completed.

Another dining-room is being built, located near the old branch building on the site of the old boiler house, which was burned a few years ago. This will enable us to do away with the dining-rooms of wards 17, 18, 19, 20 and 21, and the space thus secured can be utilized as sitting-rooms.

A conduit is being constructed between the new Verplanck dining-room and the annex building, through which will be conveyed the steam pipes and which will also be used as a food conduit, this being one of the principal objects in constructing the conduit, as the food can be more quickly delivered and will lose less heat during the transportation than when conveyed by wagon, which has been the custom heretofore. For some time past food has been conveyed from kitchen No. 2 in the new building to the dining-rooms of the various branch buildings by means of hand trucks or wagon through the conduit which leads from the kitchen and joins the basement under the new branch, in which are wards 13, 14, 15 and 16. Food is also thus conveyed to the old branch buildings, now known as wards 17, 18, 19, 20 and 21. This has proven to be a great advantage over the old system of delivering food by wagon.

The annex building has been painted outside and is being thoroughly renovated by being replastered and painted inside.

The four pavilions occupied by the men patients have been painted inside and outside and spray baths have been put in each. One of the four pavilions is being used as a dining-room for the men patients, and the work of caring for these wards and dining-room is being done by women patients.

The staff house has been painted inside and outside and additional furniture supplied throughout.

Wards 11 and 12, which are isolated, are now being used

for the phthisical cases. The first floor, known as ward 11, is devoted to the purposes of sitting-room in one part and a dining-room in the other part, the more feeble bed cases occupying the second floor.

A solarium, two stories high, has been built upon the south side of these wards and has been in use for several weeks. The south side and ends are enclosed with glass. The second floor is used as a dormitory and is occupied by 20 bed-ridden patients. The construction is such that the windows can be removed in the summer and a sufficient number can be opened in the winter to permit of airing and the carrying out of the improved method in the treatment of the phthisical cases. During the summer months our phthisical patients sit outdoors under a tent, or in the shade of the trees during the entire day when the weather will permit, and they are always isolated from the other patients.

A much needed sea wall is now being built to protect a portion of the beach south of the boiler house, and we are filling in behind this wall with ashes and dirt.

The old plumbing in the Verplanck building is being renewed under contract at the present time.

A system for heating smoothing irons by electricity has been installed in the laundry, and a small number have also been placed in the sewing-room for use in pressing garments.

The small, old-fashioned windows of the single rooms in the old branch buildings have been closed up, and larger, ordinary sized windows have been built below them, thus rendering the building more modern in appearance and much more comfortable for the patients.

EMPLOYMENT OF PATIENTS

The 200 men patients admitted by transfer from the East Hospital last year have done faithful work in the various departments to which they have been assigned. About 26 have taken care of the coal received, unloading barges and ultimately taking this coal to the boiler house for consumption. Others

have looked after the removal of ashes. About 50 have had the care of the farm and grounds. Others have been detailed to the stable and to the two kitchens. A few work with the various mechanics, but the most severe task for our men patients during the past year has been the excavating for the conduit leading from the new Verplanck dining-room to the annex. An average of 40 men has been employed on this work since July 15. It has been a difficult piece of work, owing to solid rock and the large number of bowlders which required blasting before they could be raised from the excavation. This work has been going on day after day until the present date; it has been practically completed, and I am pleased to report that no serious accident has occurred during this time. The blasting of the rocks was done at times when the patients were absent. The men have continued uniformly healthy throughout the year.

Nearly all other work about the hospital, especially so far as concerns the domestic matters, has been done by the women patients. An average of 83 per cent. of the entire hospital population has been daily engaged in some useful employment. In our industrial department a large sewing-room and mat factory have furnished employment for about 150 women patients, who make all the outer garments in the way of dresses, cloaks, aprons, etc., for the women patients, and suits, shirts, and overcoats for the men patients. We also do the repairing and make a large number of shirts for the male patients of the Manhattan State Hospital, East. In the sewing-room are 16 sewing machines which are now run by electricity, this having been introduced during the past year. We also have in one department of the sewing-room automatic smoothing irons heated by electricity for pressing clothes. In the adjoining room patients are engaged in making mats, rugs, rag carpets (by means of two looms), brushes, cushions, mattresses, repairing cane-bottomed chairs, etc., while a few others are employed making fancy work of materials of different kinds. Aside from the sewing-room

work, many patients are employed at sewing on the wards, making sheets, pillow cases, towels, doing repair work, etc.

Patients are selected for these various employments according to their previous occupation, if possible giving due consideration at the same time to their mental and physical condition and their adaptability for certain kinds of work. Many who have had no previous knowledge of special work in any of the various departments are taught to employ themselves in some way, as at brush or mat making or at millinery work.

The three pavilions occupied by the men patients are cared for by the women patients detailed for that purpose, as also is the men's dining-room, the men performing no duty in the way of housework.

About 130 women have steadily been employed in the different departments of the laundry. While most of the laundry workers are chronic cases, many convalescent cases have derived benefit from employment as laundry workers.

Other women patients are detailed to assist in the kitchens and at cleaning vegetables. About 65 or 70 have been employed at out-door work regularly in the greenhouse, gardens and on the lawns, doing light work, such as pulling weeds, collecting small fruits and vegetables, and raking cut grass or leaves on the lawns. These are divided into parties of about 12 or 15 each, supervised by women attendants. It is rather pleasing than otherwise to see these parties in different parts of the grounds engaged at gardening, or as florists, all aware of the fact that they are doing something that is useful and beneficial; the greenhouse is cared for by women patients only. This method of employing women patients is becoming quite a feature of this hospital. Those who manifest a liking for out-door occupation and who it is thought would receive benefit mentally and physically by out-door life are selected, and my observation has been that they invariably improve, many having left the hospital recovered after having followed this line of employment, and I might say treatment, for it is an important part of the means used to secure recovery. Those patients who are less

skillful in the care of plants and flowers are given weed pullers and rakes, and with these implements they do useful work in the care of the lawns. As a patient shows more interest and manifests more intelligence in her work, although this may be simple at first, she is placed where more thought and more complicated operations are required, and thus by a system of promotion, as one might say, she is raised from a party of weed pullers or a party using rakes and allowed to engage in the selection of fruits and vegetables that are ready to be collected but requiring discrimination between the ripe and unripe. She might still further be advanced to systematic occupation in the greenhouse, where the work is still more complicated and requires more intelligence, and be taught in regard to the different species of plants and flowers, the methods of propagating and raising same, also in regard to potting plants. An inspection of the greenhouse at the time these patients are working will demonstrate to one the real enjoyment they find in this kind of work.

The domestic affairs of the home for the men employees, and also of the home for the women employees, are looked after by the women patients under proper supervision. The wards of the hospital show the handiwork in various ways of women patients, and some manifest remarkable skill in preparing these decorations.

In a few instances selected cases are allowed to assist in the nursing of the sick, certain patients showing sympathy and a fondness for this kind of work; the great majority so engaged are found to become excellent nurses and assistants in the sick-room. No great responsibility of course is permitted in these cases; their nursing is all done under the supervision of the charge nurse. It has been my policy to give some employment to all who are able to do anything, even though it may be of little use in the economy of the hospital. Patients are encouraged to do work or to employ themselves in some way and I find that they are much better for it.

PATHOLOGICAL LABORATORY

Laboratory work of the past year has consisted mainly:

First—Of blood examinations and blood counts, search for parasites, including certain chemical tests.

Second—Of secretion examinations, viz, sputum, urine and stomach contents.

Third—Miscellaneous, such as autopsies, tissue examinations, detection of parasites.

There have been 90 blood counts, each case being successfully examined as to quantity and quality of corpuscular elements, the number of erythrocytes, leucocytes, and plaques have been estimated by means of Zeiss's hematocytometer or by hematokrit and the hemoglobin percentage, estimated according to Gower's apparatus.

In addition there were examined 15 different specimens for the presence of plasmodium malaria (by differential staining) which were revealed in various stages of development in seven of them, whereas the others were negative.

As to sputum work, the excretion of 74 different persons was examined, 70 per cent. of which plainly showed the presence of tubercle bacilli, the remainder being negative.

It is needless to state that the absence of the specific germ in a given sample of sputum does not per se rule out the possibility of the disease.

In some cases the preparation and careful search of from six to ten different mounted slides was necessary to form the correct diagnosis. The remainder, 30 per cent., showed evidences of destructive process—degrees of septicemia, viz: the presence of pyogenic organisms, such as streptococci, staphylococci, bac. pyocyaneus; lastly micrococci, pneumococci, etc., also a host of fungi and parasites; others contained shreds of tissue, elastic fibres, bronchial plugs, etc.

Nine hundred and ninety-four urine analyses were made, 12 per cent. of which showed albumen or other proteids, 2 per cent. responding to the various tests for glucose. A few presented pus, others contained blood, and in some casts were found.

The quantitative estimation of urea was done in 5 per cent. of the cases.

A few examinations of gastric contents were made, but no appreciable pathological conditions were thereby found.

At the morgue 18 autopsies were performed and all interesting specimens preserved and prepared for further investigation.

As to tissue examinations there were a number of specimens of epidermis presented for the purpose of detecting bacterial growth, such as is characteristic of erysipelas, typhoid, or parasites, as in scabies, the various forms of tinea; lastly, search for the presence of mematodes.

As an aid to operative procedure the laboratory has been of some use, as for instance in the identification of benign or malignant growths respectively, and the consequent removal of the diseased part. The laboratory has in a general way been improved by the recent addition of more scientific apparatus, such as an electrical centrifuge, appliances, etc., and efforts have been made to perform all work economically and conscientiously so far as was consistent with material and facilities at hand.

Referring to the matter of autopsies, would explain that the number held during the year (18) appears very limited considering the number of deaths at this hospital. Autopsies are seldom held except in those cases where there are no friends or correspondents, and in other instances, where there are friends, their consent is always secured. The wishes of friends are always considered in these matters. There seems to be a strong prejudice among the people of the class who visit this hospital against allowing post-mortem examinations, and great care is exercised to avoid any conflict in this direction. It is my constant desire to encourage research by investigation into the pathology of disease by frequent autopsies, and the material, if at all times available, would be invaluable in clearing up many pathological mysteries in this department of the work.

GYNAECOLOGICAL WORK

The following is a report of the more important work done in this department during the year:

Cervical lacerations.....	93
Perineal lacerations.....	28
Prolapsus uteri.....	7
Uterine retroflexion.....	17
Uterine anteversion.....	1
Uterine anteflexion	4
Rectocele	4
Cystocele	6
Prolapsus recti.....	3
Hemorrhoids	6
Pregnant	6
Intra mural fibroid.....	3
Extra mural fibroid.....	4
Abnormal uterine atrophy.....	4
Ovarian cyst	1
Endometritis	3
Syphilis	3
Umbilical hernia.....	3
Inguinal hernia.....	2
Ventral hernia	1
Congenital tumor of labium.....	1

This number does not include many suffering from simple ailments, e. g. menstrual irregularities.

The surgical and gynaecological appliances furnished by this institution are better than those supplied in previous years, bringing about a more successful course of treatment of women's diseases.

Fresh and salt water bathing proceeded as usual; the latter occurred during the summer months 28 times; the greatest company of patients entering the bath in one day was 881.

OPHTHALMOLOGIST

Twice each month the physician having charge of this department has visited the hospital and given attention in his specialty to all requiring it. No important operations have been performed during the year, but careful attention has been given to cases requiring medical treatment, and also in minor matters calling for surgical interference.

ODONTOLOGIST

Alternating with the above mentioned physician, the odontologist has visited the hospital regularly twice each month, to care for cases presented in his department.

This special work forms an important adjunct to the general medical work of the hospital, and the service rendered in this particular branch is important and appreciated.

CLINICS

During the latter part of the year at the medical colleges clinics were held by Dr. Hirsch at this hospital for students of the Cornell Medical School. Typical examples of mental disease were presented to the classes, and their cases described.

Clinics were also held by the Eclectic Medical College.

These opportunities for students to gain a practical knowledge of insanity are unexcelled in any part of the world, owing to the large number of patients received annually, and every advantage possible is offered to further medical knowledge in this direction.

AMUSEMENTS

The amusement fund thoughtfully established by the State Commission in Lunacy enables us to provide our patients with healthful and varied recreations. Considerable time and attention are devoted to athletics, both outdoor and indoor, and these as well as all other forms of amusement are directly under the supervision of the medical staff. The results brought about in the improved mental and physical condition of patients con-

firm the wisdom of placing this form of recreation in the front ranks as one of our most valuable therapeutic agents.

Our bowling alley has proved to be a most entertaining diversion and is greatly appreciated by the convalescing patients, who manifest much interest and enthusiasm in it, and the game is also enjoyed by employees.

Weekly dances and open-air concerts, which are held during the summer months on a large platform under the trees on the recreation grounds, continue to be a source of unremitting pleasure to the younger class of patients.

The stringed orchestra, composed of women nurses and employees, is very much improved and reflects credit upon the members, who cheerfully devote no small part of their own time to practice.

During the summer and autumn months lawn festivals, field day sports, golf, basket ball, tennis, croquet, etc., furnished healthful and diverting amusement.

Through the courtesy of Dr. A. E. Macdonald, superintendent of the Manhattan State Hospital, East, many of our patients have enjoyed witnessing several games of baseball, etc., on their recreation grounds.

During July and August weekly excursions on the hospital steamer "Wanderer" have been made to various points of interest in New York harbor and were a source of real pleasure and recreation to many of the patients who assist in the industrial part of the hospital.

Stereopticon lectures, vaudeville entertainments, musicales, etc., have been given from time to time by home and outside talent.

The wards are fairly well supplied with games, musical instruments, aviaries, etc., all of which are obtained from the amusement fund. A certain portion of this fund is used in assisting in maintaining the brass band of the Manhattan State Hospital, East, as two concerts weekly are given by them to our patients.

PHYSICAL CULTURE

Good results continue to follow the work with the class in gymnastics and physical culture. The younger convalescent patients manifest more interest, and in reality derive more benefit from the exercise than any others, yet the more sluggish ones, who convalesce slowly, are very much benefited. The class meets three times a week, the members of which are always selected by the ward physician and during the sessions are under the supervision of a medical officer and the tutelage of a nurse who is qualified for the work.

One of these class sessions is held at the bowling alley and the patients engage in the game of bowling, a pastime heartily enjoyed and appreciated by them. Calisthenic procedures are regarded as valuable adjuncts to other remedial measures in the treatment of the insane.

OVERCROWDING

As some relief for this condition is in view, owing to the proposed opening of the new buildings at Central Islip for the admission of patients, I need say but little on this subject at the present time. Notwithstanding the alleviation apparent in this direction, it is imperative that the division of the hospital on Ward's Island be relieved at the earliest moment possible, and it should receive preference for the following reasons. This hospital is overcrowded to the extent of 28 per cent. beyond its capacity. In some instances other State hospitals are overcrowded only to the extent of five per cent. and in still other cases even less than that over their capacity. It must then be apparent to all that our condition is becoming serious. Our actual census on the last day of the current fiscal year was 2,836 as compared with 2,732 on the 1st of October, 1900, showing an actual increase in numbers of 104. A further increase during the ensuing year will probably be as large. As the division at Blackwell's Island will soon be abolished and the patients transferred elsewhere, our attention should be given more particularly to the condition at this division of the hos-

pital. The capacity of this division is 1,568 and the present census is 2,021, showing an excess of 453 over the capacity. Reduction in the census is demanded for the good of the many acute curable cases that are coming daily for the care and treatment of the hospital, as well as for the comfort of the inmates generally.

For several years I have advocated the establishment of a colony somewhere along the shore of Long Island Sound, accessible by boat, which could be conducted in an economical way, for the care of the chronic insane, and I strongly recommend that the board of managers advocate the establishment of a branch institution for this purpose. Sufficient land should be purchased to give employment to a large number of these patients, and inexpensive but comfortable frame detached buildings be constructed with open wards for occupancy by this class.

These buildings could be added from time to time as necessity required at moderate expense, and adverse condition, which now is ever present, could be easily and effectually remedied.

MEDICAL LIBRARY

It is our custom to call for a few standard medical books on each bi-monthly estimate in order to gradually increase the size of our medical library. In this manner we are accumulating a medical library of fair proportions containing some of the most important medical works on insanity, nervous diseases and general medicine.

During the year we have added 18 works on medicine, and at the present date the library consists of 66 volumes.

Medical journals were received by the hospital for the use of the medical officers in connection with the library.

The officers of this hospital have unusual advantages in being located so near a large city, which presents unexcelled opportunities in the way of medical colleges, general hospitals and medical societies whereby they may keep closely in touch with the progress of medical and surgical science.

MEDICAL STAFF

No changes have occurred among the non-resident medical officers and very few among the resident medical staff.

Dr. John G. Elliott, medical interne, resigned October 1, 1900, and was appointed junior physician at the Hudson River State Hospital.

Dr. Wellington A. Crofoot was appointed November 20, 1900, to fill the vacancy thus created.

PHOTOGRAPHER

The usual work of this department has been carried on during the year. Patients arriving have been photographed; also those leaving the hospital. Many outside views have been taken, showing the progress of the work being carried on. Inquiries are frequently made at the hospital for persons who have mysteriously disappeared, and these photographs serve as an important aid in the matter of identification.

FIRE PROTECTION

Our buildings are fairly well equipped with iron or stone fire-escapes; wards, workshops and other buildings are provided with standpipes, hose, fire extinguishers, hand grenades, etc.

Our fire department is thoroughly organized among the officers and employees of the hospital, and consists of a steam fire engine, hook and ladder and two hose companies, also a life-saving corps. A weekly drill of the entire fire department is held under the direction of the medical officers. The physician on each service instructs his nurses and attendants in the fire rules and the use of the different fire appliances. Patients are thoroughly drilled in the rapid formation of column. Frequent inspections of fire-escapes, attics, cellars, etc., are made by the officers of the hospital.

Our fire-alarm system, while not complete, is fairly satisfactory. We are always able to summon the city fire department, and the hospital steamer is always available in the event of a fire. The rules of Dr. H. L. Prince for the protection of

hospitals have been in a measure adopted and altered to meet the conditions of this institution. They are rigidly enforced.

TRAINING SCHOOL

With this report the fifth annual session of our training school has closed. We had at our last commencement exercises twenty-seven who passed successfully the final examinations for graduation, a majority of whom attained a very flattering percentage. Six juniors passed their examinations, admitting them to the senior class for the next session.

The lectures, covering a period of thirty weeks, are given by the members of the medical staff in conjunction with as much clinical work on the wards as a hospital of this nature will permit. In view of the lack of variety and abundance of clinical material, the didactic lectures are made as interesting and instructive as possible by means of charts, manikins and experiments and demonstrations, etc., in the laboratory and at the autopsy table. As required all the members of the senior class served from four to six weeks in the several wards where the sick and infirm are kept, where they have a very fair opportunity of gaining an insight into and becoming practically conversant with the needs and necessities of the intelligent care of the sick. We are still following the outline of lectures as given in Dr. Wise's text-book on nursing. We issue at the beginning of each session a small pocket calendar, detailing in full the work for the entire year, so that any conditions coming up throughout the year out of the regular routine may be so arranged as not to conflict with nor interrupt this essential department of the hospital.

The post graduate school commenced with the beginning of last session has proven attractive and a benefit to those who have finished their classes. Its aim—to stimulate and to encourage the graduates to further study—has been fully realized, and during the incoming year more attention than ever will be paid to this school. A calendar for the entire year has been arranged, detailing in full the scope and subjects of the

lectures. Nearly all of the post-graduates have volunteered for this school, and indeed the class is so large that it has been found necessary to divide it into two sections. To stimulate diligence and proficiency in this school an attractive certificate will be awarded to those who have passed successfully the examination to be given at the end of the session.

It is gratifying now and then to hear of some former member of our school meeting with success outside in the private practice of their profession, and from time to time requests are still made to us by physicians outside for a nurse to assume the care of some private case.

The commencement exercises were held this year on May 22, 1901, as follows:

PROGRAMME

Overture—"Si j'étais Roi".....Adam
Hospital Band.

Invocation

Address—

Hon. Henry E. Howland, President Board of Managers

Presentation of Graduating Class—

John McAnerney, Esq., of Board of Managers

March—"Hail to the Spirit of Liberty".....Sousa
Hospital Band

Presentation of Diplomas by Mrs. Eleonora Kinnicutt and Mrs.

Louisa Pierpont Satterlee, of the Board of Managers

Selection—"San Toy".....Jones
Hospital Orchestra

Addresses—Rev. Wm. R. Huntington, D. D., Frederick Peterson, M. D.

Benediction

Paraphrase—Melody in F.....Rubenstein

As formerly, a ball and supper were given to the graduates in the evening to which they were permitted to invite friends from their homes.

Following is a list of those who were graduated:

Brennan, Mary J.	Lacey, Ellen
Carolan, Catherine	Leddy, Anna E.
Conroy, Annie M.	Lenihan, Margaret
Connelly, Henrietta	Lloyd, Mary A.
Donahue, Mary A.	McMorrow, Catherine
Duggan, Josephine M.	Mehan, Delia
Duggan, Kathleen T.	Mooney, Margaret
Dwyer, Mary A.	Murphy, Hannah
Ferguson, Alice	O'Callahan, Marguerite
Fletcher, Katherine G.	O'Connor, Nellie J.
Gambon, Katherine	Scanlon, Mary
Hanly, Maria	Smith, Helen J.
Henry, Margaret	Sweeney, Catherine J.
Horan, Annie V.	

CHANGES AMONG EMPLOYEES

The total number of employees appointed was 322. The number of resignations, discharges and transfers among all employees was 301; 246 of the number appointed refer to the class of attendants and nurses, and of the number resigned, discharged and transferred 239 belong also to this class. A considerable difference is noted between the persons leaving the service and the number appointed, but that is explained from the fact that some positions have been allowed, and there were existing vacancies at the beginning of the fiscal year. The filling of these vacancies, of course, represents in most cases the appointment of persons new to the service. Among the causes given when leaving the service are "change of occupation," "to secure work of a different nature," "ill health," a few to marry, and others "to return to their homes." A certain number were discharged for cause and a few were transferred to other institutions. Many applications for transfer from other hospitals to this are received, but this interchange of employees between hospitals is not encouraged, although it is occasionally allowed.

It must be apparent to any one that such frequent changes are a detriment to the service.

One important factor in the causation of these changes is, in my opinion, due to the close proximity of the hospital to a large city. The majority of our employees come from New York city and it is comparatively easy to obtain employment of a different nature in the city as compared with such opportunities in the neighborhood of State hospitals located in country districts.

If we were situated further from the metropolis it is probable that changes in our corps of employees would be less frequent.

Careful attention is given to the instruction of newly appointed attendants in regard to their duties, as explained in the book of rules. They are frequently examined on these rules by the medical internes, also by supervisors; at the end of the probationary period they have a written examination upon these rules, and are graded according to their merit and fitness. I am pleased to report that this custom has met with encouraging results, and infringement of the rules is much less frequent than before the system of teaching the probationary attendant was introduced. Previously they were careless in familiarizing themselves with the rules of the hospital, but now, understanding that they are to be examined at the end of three months, it is seldom that a new attendant fails to interest herself sufficiently to meet the demands made upon her for this examination. She is obliged to read, study and learn these rules.

RELIGIOUS SERVICES

Careful attention has been given to the spiritual welfare of our patients by the Roman Catholic chaplain, the Rev. Father Gelinas, at this department, and by the Rev. Father Blumensaat at the Blackwell's Island division until the time of his death, which occurred May 5th of this year. Following him the Rev. Father Barnum has officiated for the Roman Catholic patients. Rev. T. G. Littell and the Rev. Alfred Blewitt, Protestant chap-

lains, have officiated here at Ward's Island, and the former gentleman held services also on Blackwell's Island. Church services have been held regularly on Sunday and Wednesday of each week.

In this connection I would explain that the Rev. Herman Blumensaat was born in Prussia November 23, 1845. He came to officiate at Blackwell's Island August 15, 1887, and continued in faithful service until the time of his death—May 5, 1901.

ACKNOWLEDGMENTS

It is with pleasure that I acknowledge the following donations to the hospital:

Mrs. H. A. Van Liew, material for fancy work; Dr. P. M. Wise, magazines; Mrs. Eleonora Kinnicutt, magazines; Mr. Hope, ribbon and candy; Fruit and Flower Mission, Christmas donations of fruit, greens, jelly, candy, etc.; Rev. Mr. Littell, candy and fruit; Rev. Alfred Blewitt, Christmas cards and reading matter; Miss Butler, material for fancy work; Miss Perkins, material for fancy work; Mrs. A. E. Macdonald, flowers and reading matter; Mrs. Stone, material for fancy work; Mrs. Henry J. Burchell, material for fancy work; Lotus Club, papers; Hospital Book and Newspaper Society, books, magazines and papers; Mr. Geo. E. Dodge, 45 books.

To all the officers and employees I tender my thanks and high appreciation for the zealous manner in which they have performed the manifold duties assigned to them, and to the State Commission in Lunacy and the board of managers I am especially grateful for their unfailing kindness, consideration and hearty cooperation in the responsible duties which I have to discharge.

Very respectfully

E. C. DENT

Medical Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, October 10, 1900

HON. HENRY E. HOWLAND, Esq., *President Board of Managers*

Dear Sir.—You are respectfully informed that the customary reports for the month of September have been forwarded to the office of your board for filing as heretofore.

I submit herewith a bill of James Fay for \$56 which was deferred at the last meeting.

The window guards spoken of in my last report as not being completed have been properly installed and we are now occupying the building.

The fire department poles, which have been lying on the dock for several months, have been trimmed and erected in accordance with the plan decided upon by a committee of your board.

The refrigerating plant has been turned over to the institution, having completed the ten days' test.

In the cold-storage building no provision has been made for the storage of ice and for the drips from the pipe, and one room has not been properly insulated. I have spoken to the State Architect about this, who communicated with the De La Vergne Refrigerating Machine Company. I enclose a bid from that company for \$480, which the State Architect thinks is reasonable for the work to be done. I have asked the State Architect to draw up specifications for this work.

The attention of the board is called to the fact that The McDermott-Bunger Dairy Company are not delivering milk in accordance with the specifications of their contract. I submit herewith an analysis made by Dr. Witthaus, director, Institute of Chemistry, Pathology and Bacteriology of this city, and also one from the health department of this city, both of which show that the samples fall below the requirements of the specifications. Weekly analyses are made at this hospital, and the last showed that the percentage of fat was one-tenth below the specifications, namely, 12 per cent.

Proposals for supplies of meat for six months from October 1st were advertised for in the Tribune, Herald and the Butchers'

Advocate. The enclosed tabulated table shows the bids received. Messrs. Schwarzschild & Sulsberger being the lowest bidders, the finance committee awarded the contract to them. We are at present receiving meats from this firm and so far satisfactorily.

Messrs. Blake & Williams are still working on their contract of covering pipes. They assert they will complete the work this week.

The work of painting the exterior of the staff house, mentioned in my last report, has been completed.

The matter of erecting a dining-room for the Verplanck building, for patients and women employees, is still under consideration, due to the fact that the State Architect has not yet been able to submit the plans to the Commission.

A bowling alley for the patients, under ward 21, has been completed and will be used in a short time.

This hospital made an exhibit at the American Institute Fair, held in this city during the month of September. Dr. Hexamer, the manager, informed me that it was very much admired by everyone and very highly spoken of.

Yours respectfully

(Signed)

E. C. DENT

Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK CITY, November 14, 1900

Hon. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—I beg to submit the following report concerning affairs of this hospital since the last meeting of your board. The customary reports have been forwarded and are at present on file in your office.

The following bills are submitted for your approval and consideration:

Bill of Messrs. Blake & Williams for \$8,832, final payment on steam heating, ventilation and hot water supply for the new

detached building, with the certificate of the State Architect. I would recommend that this bill be held back until some minor work is completed, concerning which I have written the State Architect.

Bill for the De La Vergne Refrigerating Machine Company for \$4,012, final payment on their contract for refrigerating machine and ice-making plant installed at this hospital. The work has been turned over in accordance with the specifications, and I would recommend that the final payment be made.

I submit correspondence in regard to a bill of the American Ice Company. It appears by this that this hospital received as per weights from the East side 59 tons, 410 pounds, whereas the bill of lading, as contracted for by the purchasing agent, charges for 120 tons.

I submit a letter from the State Architect recommending the approval by your board of an order for \$6 for grounding lead sheath, which, if left exposed, will be a menace to life.

I submit a rough drawing of the proposed new dining-room for patients and women employees, which has been approved by Dr. Wise.

The milk furnished this hospital by the McDermott-Bunger Dairy Company, under contract, does not conform to the specifications in that repeated analyses show that the percentage of fat falls below the requirements.

The refrigeration plant has been turned over and appears to be operating fairly well. There is some difficulty in getting sufficient ice, due to the fact that we are not at present extracting ice at night. Should the plant be operated at night the condensed water would be sufficient to supply the five tons required by the specifications of the contract.

The work of installing the storage room for ice is now in progress, it having been awarded to the De La Vergne Refrigerating Machine Company in accordance with their bid recommended by the State Architect, which was submitted to your board at the last meeting.

The supplies of meat received from Messrs. Schwarschild &

Sulsberger have been, up to the present time, in accordance with the specifications of their contract. The meats have been of good quality, and we are able to keep a larger supply on hand than formerly owing to our cold-storage room facilities.

The bowling alley, mentioned in my last report as being completed, has been extensively patronized by patients and employees, both men and women, and officers, and without doubt has given more satisfaction than any form of amusement heretofore introduced.

Since the last meeting of your board three entertainments have been given for the benefit of the patients of this hospital, inclusive of Blackwell's Island. These entertainments were given by talent from the city and were much enjoyed by the patients.

The affairs of the institution appear to be running along quite smoothly at present, and I would respectfully ask that your board grant me a leave of absence for five weeks, commencing November 15th.

Yours respectfully

(Signed)

E. C. DENT

Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK CITY, *December 12, 1900*

Hon. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—I respectfully submit the following report in regard to matters pertaining to this hospital since November 14th, the time of the last meeting of your board. The usual reports have been forwarded from time to time and are now on file in your office.

I enclose herewith a certificate from the State Architect in favor of Henri D. Dickinson in the sum of \$406.91 for plans and specifications for plumbing and drainage of the detached building, work done under the direction of Hon. I. G. Perry. I would respectfully ask authority to arrange for the payment of this bill.

I submit for the consideration of your board a letter from the State Architect dated December 7th, in regard to two new boilers to be installed at this hospital.

I also submit another letter from the State Architect, dated November 28th, in regard to the final certificate concerning the work of Messrs. Blake & Williams, and indicating the assurance given by the latter firm to complete certain work on their contract in the spring after the steam plant has shut down.

The certificate of the State Architect, dated November 14th, for \$534, in favor of Messrs. Sullivan & Clark, in full of balance due on contract for erecting detached building at Ward's Island, was received November 16th. Believing that the payment of this balance had been favored by the superintendent, voucher was made for same and delivered personally to Mr. Sullivan November 20th. I respectfully ask the board to approve this action.

Referring to the minutes of the last meeting, concerning the bill of Messrs. Blake & Williams for \$8,832—final payment on steam heating, ventilation and hot-water supply for the new detached building, with which was submitted a certificate of the State Architect—would say that this bill has been held back until certain minor work has been completed by this firm in the new detached building and until assurance had been given by them to the State Architect to complete other matters of small importance in the spring when the steam plant can be shut down. In view of this assurance, would say that I have signed the vouchers and forwarded same to this firm.

The bill of the De La Vergne Refrigerating Machine Company for \$4,012, referred to also in the minutes as final payment on their contract, after having been temporarily held back until certain work had been completed by the firm, has been passed in the usual way by signing a voucher for same.

In this connection I would say that during the latter part of November the pipe leading from the skimming tank of the ice plant became obstructed, and in order to free this pipe the skimmer was removed, so that a considerable amount of oil

(which should have been separated by the skimmer) was left in the water, and this gave the ice a yellowish-brown appearance at the bottom of each cake. The steam from which the oil came was then turned to the atmosphere, and boiled Croton water was used to make the ice. The Croton ice, although somewhat dark, did not appear to contain oil. This trouble was reported to the De La Vergne company (also to the State Architect) and they made the necessary repair, their final payment having been held back until this repair was completed and it was demonstrated that after the pipe above referred to had been cleaned and skimmer replaced, by using the exhaust steam, we could again make clear ice. I would explain, however, that at this time of the year we are not receiving a sufficient amount of condensed steam to make the required amount of ice and are consequently freezing Croton water again.

The work on the storage room for ice has been completed, and during the last few days a representative of the De La Vergne Refrigerating Machine Company has been making a runway to convey the ice, as it is extracted, into this room.

The following is a statement of milk analyses as made at this Hospital:

Condensed Milk

	Per cent
Water	62.50
Solids	37.50
Fat	10.25

The percentage of fat falls below the amount specified in the contract, namely, 12 per cent.

Cow's Milk

	Per cent
Water	87.00
Solids	13.00
Fat	3.15
Specific gravity	1.031

The last barge of coal from Messrs. Parrish, Phillips & Company was received November 27th and unloaded December 6th. Since then we have had no barge at the dock to unload until yesterday (Tuesday) the 11th instant.

In view of the fact that smallpox prevails to a considerable extent in the city, special precautions have been taken to have the patients and employees vaccinated in order to prevent the introduction of the disease into the hospital. Upon request vaccine material was furnished by the department of health, and in addition two medical officers representing that department visited our hospital, approved the work already done by our own physicians and left material for a continuance of this work. It appears important to vaccinate new cases as soon as possible after their arrival, and for some time to come it is proposed to do this.

Patients, officers and employees received a liberal Thanksgiving dinner, and same was fully appreciated by all. Only the ordinary dances and amusements have been held since the last report, the amusement fund being largely devoted to defraying the usual expenses of the band and orchestra, and to meet the expenses incidental to the coming Christmas.

Yours, respectfully

(Signed)

H. C. EVARTS

Acting Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, *January 9, 1901*

Hon. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—The customary monthly reports and statistics for this hospital for the month ending December 31, 1900, have been forwarded to the office of your board as heretofore.

I submit for your consideration the following bills:

Bill of Edward Holland & Co., contractors, amounting to \$86.45, for removing garbage from Blackwell's Island, which they claim was incurred during the months of December, 1899,

and January and February, 1900, on account of having to rent a scow due to the disabled condition of the boats of the Department of Charities. I enclose letters and statements concerning this bill which show that the total expense incurred by this firm has been divided between the Blackwell's Island asylum and the Department of Charities and Correction, allotting to us a reasonable charge of 95 cents per day. Each of the other departments has paid the bill according to the contractor's statement.

Bill of H. de B. Parsons, amounting to \$10, for professional services in connection with ice-making plant at this hospital. I would recommend that this be approved by your board.

The bills approved by your board at the last meeting have been settled and vouchers forwarded.

The matter of erecting a dining-room for the Verplanck building is progressing slowly. The plans are being drawn, and I think in the course of a few weeks the specifications will be drawn and bids advertised for.

Proposals for foundations and smoke ducts, and for making smoke, steam, water and blow-off connections to the two boilers at this hospital were advertised to be opened to-day.

I submit to your approval plans for a two-story piazza for the phthisical ward, to be used as a solarium.

The refrigerating plant recently erected by the De La Vergne Company, complaint of which was made at your last meeting, is still giving unsatisfactory results. I have communicated with the State Architect and the contractors respecting the defects. It is thought that the heat from the exhaust steam would be ample to prevent freezing, and this matter is at present in the hands of the State Architect, who is to make a report on the feasibility of enclosing it.

The contractor for meats is at present delivering at the foot of East One Hundred and Sixteenth street. The specifications read that they were to deliver in car-load lots at the dock. The contractor claims that car-load lots should not be less than 24,000 pounds. The two institutions can easily arrange to have

the meat delivered in car-load lots by receiving three deliveries a month. The meats as received are neatly done up, and we have had very good deliveries, having found fault only twice, the meats then being of good quality, but not exactly in accordance with the specifications, and hence their return.

The milk delivered by the new contractors, in accordance with analysis made at this hospital, has been up to the standard.

The following is the result:

Cows' Milk

Result of Examination	Per cent	Required Specifications	Per cent
Water	86.50	Water	88.00
Solids	13.50	Solids	12.00
Butter fat	3.75	Butter fat	3.00
Specific gravity	1.032		

Condensed Milk

Result of Examination	Per cent	Required Specifications	Per cent
Butter fat	12.15	Butter fat	12.00

I have forwarded to Dr. Witthaus samples of both cows' and condensed milk for analysis.

This institution experienced some difficulty in procuring coal from the contractors up to about two weeks ago. At present they are supplying buckwheat coal No. 1 in sufficient quantities, but we have a very small margin—in fact we have very little coal ahead, and unless some arrangement can be made whereby a barge of coal can be kept constantly at the dock, I fear we will experience some trouble in the event of the river becoming blocked with ice, as is the case sometimes during the months of January, February and March. The contractors assert that they are unable at times to get buckwheat coal No. 1; this being the case, it would be advisable, if buckwheat coal No. 2 could be procured in quantities, that a certain amount be stored on the island to be used in the event of a closing of the river. Permission has been given the contractors by the chairman of the finance committee to provide against such an emergency.

I would add that our consumption of coal during the six months ending January 1, 1901, compared to the six months ending January 1, 1900—at which time the institution was burning pea coal and at present burning buckwheat coal No. 1—shows a saving of 654½ tons. This may be assigned possibly to two causes—in a measure to the milder weather of the second period and to the economic use of steam in that the conduits completed between the branch and main conduit prevents radiation; and again, additional demands have been made on the heating system in occupying the new detached building and running the ice plant. The calculation would show a total saving amounting to \$4,412, computing each ton of buckwheat coal at 75 cents per ton less than pea coal.

The repairs to the laundry have not yet been completed, but the Troy Laundry Machinery Company assures me that they will be done now in a very short time. If this be true, I may say the entire work of the East Hospital can be done here, and I will very gladly undertake the work.

On the 21st of December I observed a suspicious eruption and requested the board of health to send an inspector, who came and decided it would be better to have the case removed to North Brother Island, as he regarded it as too suspicious to be allowed to remain in the institution. On January 5th I noticed another case and requested the board of health to send an inspector, who advised that this patient be removed to North Brother Island also. The board of health agreed to receive the patients if I sent two attendants with them, which was done. Each of the cases had been duly vaccinated—the first case on December 9th, and about four days afterward an eruption appeared; the second case was vaccinated on December 6th, which did not “take,” and this eruption was noticed on the 5th inst. I have heard from the board of health about these cases. The first case they wish to return to the institution to-day, to which I have agreed. The second case is still under treatment and has a profuse eruption.

It is my pleasure to report that the patients had a very enjoyable Christmas dinner, consisting of the following:

Cream of celery soup, roast turkey with stuffing, celery, plum pudding, lemon sauce, bread and butter, potatoes, gravy, corn, oranges and coffee.

There was an abundance of good things and the dinner gave great satisfaction.

On December 27th the attendants and nurses had their Christmas ball, which one of your board made more enjoyable by contributing \$50 to add to their supper. Over 200 attended. The music for dancing was furnished by the hospital band.

The decorations throughout the wards were quite pleasing. Artificial flowers, made by patients, were used in connection with Christmas greens in decorating, the patients taking great pleasure in this work.

The lease for Blackwell's Island expires on February 28, 1901, and I would recommend that your board communicate with the State Commission in Lunacy respecting the care of the 815 patients who are now there. It will be impossible to have them cared for at Ward's Island, and unless arrangements can be made to care for them in some other way it will be necessary for steps to be taken to renew this lease until they can be transferred.

The stone building at the north end of the island was turned over by the superintendent of the East Hospital in the latter part of December and is now being used as a smoking room and lounging room by the male patients. It will be properly furnished later and will make a desirable club room.

Yours, respectfully

(Signed)

E. C. DENT

Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, *February 13, 1901.*HON. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—I respectfully submit the following report for this hospital since the last meeting of your board. The usual monthly reports have been duly forwarded and are on file in your office.

I enclose herewith a bill in favor of the G. and E. Electric Company of Binghamton, N. Y., in the sum of \$1,438.35, in full of balance due on contract for installing and finishing the electric wiring and fixtures for a detached building adjacent to the branch group on Ward's Island, and recommend that your board approve this bill.

Respecting the bills approved at the last meeting, under the head of old outstanding accounts—Austin, Nichols & Co., for \$375.11; Robert McCauley, for \$13; Nauss Bros. & Co., for \$12.85; Rogers, Peet & Co., for \$10, and R. Holzenthaler, for \$4.65—estimates have been forwarded to the Commission, which were duly approved, and vouchers have been sent to the respective claimants. This closes up the old accounts as far as the committee is aware of any outstanding debts.

In the Albany Argus of February 2 a notice appeared that James Fee of New York city had filed a claim against the State for \$431 for bags, etc. This is the alleged claim that the committee on old accounts recommended that your board not approve of in the report dated October 10, 1900. The newspaper clipping is enclosed.

The refrigerating plant remains in about the same condition as last reported. Permission has been asked to install a filter in the brine room, which will give clear ice.

The plans and specifications for the dining-room have been approved by the State Commission in Lunacy. Proposals will be advertised for and bids opened at this office on the 27th inst., at 4.30 o'clock p. m.

The matter of conduits is before the Commission and esti-

mates at the same time will be procured for erecting brick conduits from the main conduit midway between ward 13 and the Verplanck and from the Verplanck to the annex. It has been explained to the Commission, and the State Architect concurred in the statement, that there is great waste of heat from the steam pipes as they are now laid between these points, and that suitable brick conduits would result in economy.

The Curran Manufacturing Company began work on the foundations for four boilers in accordance with the specifications of the contract awarded them by your board on the 6th inst.

The drawings and specifications for the solarium for the phthysical ward, approved by your board at the last meeting, have been completed by the State Architect and are now before the Commission for their approval.

In pursuance to the resolution of your board respecting a test of buckwheat coal No. 2, I beg to state that 302 tons were received and experimented with, and it was shown not to be satisfactory. A report was made to the chairman of the finance committee to this effect. This coal could not be economically consumed in the boilers here owing to the lack of draught.

The contractor was unable to supply coal in accordance with the contract in sufficient quantities and I communicated with the chairman of the finance committee, and with his approval the purchasing agent was directed to purchase outside the contract, about 500 tons of buckwheat coal No. 1, to provide against emergency in case of blockade of the river. This coal was received very opportunely, inasmuch as we had only a few days' supply on hand. At present two barges are at the dock, containing about 250 tons each, and are being unloaded.

The contract between the Manhattan State Hospital and Holland & Company for the removal of garbage at Blackwell's Island (for \$1.25 per day) expired, and the Department of Charities did not see fit to renew the contract, due to the fact that they proposed to incinerate their garbage. This left that branch of this hospital to care for its own garbage. I had a

consultation with the commissioner of that department and submitted a proposition of furnishing \$40 worth of coal per month for the incineration of our garbage, they to remove the garbage from the grounds. These articles of agreement were drawn up and signed by the president of your board, the party of the first part, and Mr. John W. Keller, the party of the second part, which agreement is on file in your office.

At a special meeting of your board held on Friday, January 25th, a resolution was passed to the effect that the superintendents submit a detailed statement to be submitted by your board to the State Commission in Lunacy, setting forth reasonable objections to the diminution of the working force by the Legislature. I submit a detailed tabulated statement of the working force of this hospital.

I enclose a letter from Messrs. Daly, Hoyt & Mason, counselors at law, in regard to the claim of the American Ice Company for balance on a cargo of ice delivered at Ward's Island on June 28, 1900. This matter was dealt with in a report from me to your board on November 14, 1900, and a report was also made upon the matter by the hospital attorney, Mr. George C. Austin, under date of November 13, 1900, which was to the effect that, "After careful consideration of the entire matter, I am of the opinion that the ice company has already been well paid, if in fact not over paid, for the ice received by the hospital, and that their claim for the remainder of the bill should be disallowed."

The machinery in the laundry having been repaired, I communicated with the superintendent of the East Hospital that this institution would do his entire washing. We began this work last week and we were enabled to return all articles received. During the week ending February 9th about 40,000 pieces were laundered for the East and West hospitals, inclusive of Blackwell's Island.

Yours, respectfully

(Signed)

E. C. DENT

Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, March 13, 1901

HON. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—I beg to submit the following report concerning affairs of this hospital since the last meeting of your board. The customary monthly reports have been forwarded to your office and are now on file.

Bids were opened on the 27th ultimo for the erection of a dining-room, including steam heating, electric wiring, plumbing, etc., and for building conduits, and the usual course was proceeded with.

A communication was received from the State Architect enclosing a copy of a letter from Messrs. Denniston, Dyer & Co., setting forth the sum they would allow the State in the event of the State's being able to do its own excavating. I would state that the West Hospital will not be able to do any excavating for the contractor inasmuch as there are only 197 patients, and they will be constantly occupied in caring for the farm and grounds and the institution in general, in addition to work we will have to do in laying fire hydrants about the new detached building.

The foundations for the four boilers are progressing rapidly and will be ready in a very short time for the boilers.

The advertisement for the construction of a solarium for the tuberculosis ward has been inserted in several of the papers in accordance with direction of the State Commission in Lunacy. Bids are to be opened on Friday, March 15th, at half-past four o'clock. A copy of the advertisement has been sent to the State Architect.

Referring to the resolution of your board at the last meeting concerning a steam derrick, the matter was brought before the Commission at their visit here on Saturday last, and I agreed to endeavor to procure cheaper bids and submit them again.

I beg to inform you that the meat contract will expire on March 31st, and in renewing this contract I would suggest that

bids be received on the delivery of meat on the steamer at One Hundred and Sixteenth street and on the dock at Ward's Island in quantities as called for.

The contract for coal calls for 12,000 tons, and we have so far received 7,450 tons since the contract was made (July 1, 1900), leaving about 4,550 tons to be received. This is an economical use of coal. Since the last meeting the contractor has been unable to supply coal in sufficient quantities, and it became necessary to obtain permission to purchase outside the contract. Two barges containing 500 tons were thus purchased.

The laundry work for the East Hospital is now being done in our laundry here. Last week 23,303 pieces were laundered and returned within the week.

I enclose herewith a copy of notes of the official visit of Commissioners Osborn and Parkhurst concerning their visit of March 9th.

Yours, respectfully
(Signed) E. C. DENT
Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, April 10, 1901

HON. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—I herewith respectfully submit report of the transactions of the hospital for the time elapsing since the last meeting of your board. The customary monthly reports have been forwarded to your office and duly filed.

I submit the following certificates received from the State Architect for your approval:

Certificate in favor of the James Curran Manufacturing Company, in the sum of \$1,020, for work on their contract for building four boiler foundations, including smoke duct, etc., to two boilers in the boiler-house at this hospital, which leaves a balance of \$1,055. I would recommend that this payment be approved by your board as recommended by the State Architect.

Certificate in favor of Messrs. Blake & Williams, in the sum

of \$129, for furnishing materials and performing labor for replacing two pieces of 10-inch pipe in the main steam line in the engine room, remedying all leaks in this line and replacing covering which has been removed, and I would recommend that your board approve its payment in accordance with the State Architect's recommendation.

Bids for the solarium for the tuberculosis ward were opened on the 15th inst., and the award was made by your board to Mr. Peter Keeler for the sum of \$3,308, he being the lowest bidder.

The matter of enclosing the condensing tower was brought before the Commission at their last meeting with the result that it was referred to the State Architect. At the latter's request Mr. Percival Robert Moses called on me yesterday for the purpose of examining the tower, and he concurred in the recommendation that the tower should be enclosed. An estimate is now before the Commission by request of your board.

An estimate was sent to the State Commission asking that they grant sufficient money to erect a coal hoist. The proposition was very favorably considered by the Commission, and I am of the opinion that they will eventually allow it.

I have seen recently two of the contractors for the new dining-room and for the solarium, Mr. John Dyer, Jr., representing Messrs. Denniston, Dyer & Co., and Mr. Peter Keeler, and was informed by each that he would not begin work until about four weeks for the reason that the clause relative to the eight-hour system was objectionable to them and they had conferred with the architect respecting its elimination, and that the architect had informed them it would require about four weeks to have the contract ready for signature with this clause left out. I saw one of the commissioners and informed him about this matter and told him it would be very advantageous to have this work begun at the very earliest moment so as to have it finished before winter. He requested me to write to the architect calling his attention to it, which was done.

A filter has been erected in the cold-storage building and is

giving satisfactory results. During the period in which the Croton water was so very muddy the filtered water was supplied to the wards.

The proposals for fresh and salt meats were duly opened on the 15th ultimo, and the contract for fresh meats awarded to Messrs. Schwarzschild & Sulsberger, and for salt meats to Messrs. Nelson Morris & Co., they being the lowest bidders in each case. Meats at present received are in accordance with the specifications.

The attention of your board is respectfully called to the fact that existing contracts will expire as follows:

The contract for coal with Messrs. Parrish, Phillips & Co. will expire June 30, 1901.

The contract for condensed milk with the Anglo-Swiss Condensed Milk Co. will expire June 30, 1901. When entering into a new contract I would recommend that the contractor be required to deliver milk during the summer in cans protected by a cover or shipping jacket to prevent the milk souring.

An Easter entertainment was given for the patients on the evening of the 8th instant, a program of which I enclose. Refreshments consisting of chocolate, candy and cake were served. The candy (about sixty pounds of chocolate) was donated to the hospital by Mr. Andrew J. Hope.

Yours, respectfully
(Signed) E. C. DENT
Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, May 8, 1901

HON. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—I respectfully submit the following report of affairs of the Manhattan State Hospital, West, since the last meeting of your board on April 10th. The usual reports have been forwarded to your office.

The State Commission in Lunacy has approved of the instal-

lation of the Parsons blower, and buckwheat No. 3 coal has been purchased for the test and has been received. We are awaiting Mr. Parsons' installation of the blower to begin the trial. He asserts that he will install it this week, and the experiment will be made as soon as it is ready.

The material for enclosing the condensing tower has been allowed by the Commission and has been ordered. The work of enclosing the tower will be done as soon as possible.

The Commission has also allowed fifty electric flatirons for the laundry, which will do away with the stoves now used. In my opinion this is a great improvement over the present system and will avoid the risk of patients being burned.

The Commission has allowed sufficient money to paint the interior and exterior of wards 28, 29 and 30 (annex building). The work will be commenced in a short time.

We were enabled to procure lower bids from a contractor for erecting a sea wall, due to the fact that excavation in the city enabled him to supply stone at a lower price than could formerly be obtained. An estimate has been forwarded to the Commission for about \$5,000 for the entire sea wall, in accordance with the New York specifications for dry rubble wall. The Commissioners' attention was called to this on the occasion of their last visit here, and they thought it quite reasonable, and I am of the opinion that they will allow the estimate.

Bids have been procured and an estimate made and forwarded to the Commission for a coal hoist for the coal dock on the West side. On the occasion of the Commissioners' last visit the matter of the coal hoist was discussed and they were of the opinion that the matter of delivering coal from the coal dock to the East Hospital boiler room should be considered, and they thought either an overhead cable or surface car conveyance would answer the purpose.

The contractors, Messrs. Denniston & Dyer, have begun excavating for the new dining-room adjacent to the Verplanck building.

The Fitzgibbons boilers, the foundations for which have been

finished for some time, have not yet been installed. The foundations are ready to receive the boilers.

I would respectfully call the attention of your board to the matter of adjusting the expense of supplying electricity to the East Hospital, coal to the dock, and running the cold-storage plant. It will manifestly be an injustice for the West side to assume this additional expense in making out its annual per capita cost of running the institution. I would ask that these matters be adjusted so that the East Hospital may assume its just share of the expense, which will otherwise make our per capita cost on estimate No. 9 very large.

Advertisements for proposals have been inserted in several of the papers for the reconstruction of the old branch boiler house into a dining-room, and the bids are to be opened at 4 o'clock p. m. to-day.

At the request of the architect I respectfully submit a communication to me from him respecting the employment of Mr. Sussdorff.

The annual May day festivities were held at this hospital on Saturday, the 4th instant. The patients participated in the May pole dance, quadrilles, games, etc.; refreshments were served, and the event was a very enjoyable one.

The patients were given an entertainment on the 17th ultimo in which both patients and employees took part. To enable both men and women patients to attend it was repeated the following evening. The entertainment was also given at the Blackwell's Island branch, the hospital steamer going to Blackwell's Island for that purpose.

An attendant at this hospital developed symptoms of scarlatina yesterday, and the case was promptly reported to the board of health. An official from that board visited the hospital in the afternoon and she was removed to the Willard Parker Hospital. Every precaution has been taken to prevent the spread of the disease by fumigating, disinfecting, etc.

Yours, respectfully

(Signed)

E. C. DENT

Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK CITY, *June 5, 1901*HON. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—I respectfully submit the following report for this hospital since the last regular meeting of your board. The customary monthly reports have been forwarded and are now on file in your office.

I submit herewith a letter from Mr. Heins, dated May 24th, enclosing certificate in duplicate in favor of Mr. Charles A. Sussdorf, amounting to \$30, in payment of his services as architectural draughtsman and inspector in charge of general construction work. I would recommend that your board take action in this matter.

The Parsons blower has been installed on one of the five boilers on the west side of the power-house. With the sanction of the chairman of the finance committee I have written the Parsons Manufacturing Company authorizing them to install the blower on the remaining four boilers on the west side of the power-house under the terms agreed upon. It will thus be possible to determine by comparison whether the blower will prove an economical investment.

I would recommend that a contract for coal for the Manhattan State Hospital, West, be entered upon, inasmuch as of the 12,000 tons contracted for last year, 10,875 have already been received—unless an agreement is made with the Manhattan State Hospital, East, to supply coal in return for electricity, etc., furnished by this hospital during the past year. If this is done the new contract will not be needed before September 1st. Twelve thousand tons of No. 1 buckwheat coal or 16,000 tons of No. 3 buckwheat coal will be required for the coming year. About 500 tons of stove coal will also be needed.

I would also call attention to the fact that the contract for condensed milk will expire on June 30. When the present contract was entered upon it was not deemed advisable to contract for fresh milk and it has been purchased in the open

market. As we have been obliged to pay $4\frac{1}{2}$ cents per quart against 3 cents during the corresponding period last year on contract, I would recommend that a contract be made for fresh milk also.

I have received a communication from Edward Joy, in which he informs me that he has written to the board to the effect that his bid was too low and that he wished to withdraw it. I was informed of this while in Albany and I spoke to the Lunacy Commission about the matter. They appeared to think that the error was due to carelessness on the part of Mr. Joy.

Mr. Augustus E. Gent having reduced his bid for plumbing in connection with the reconstruction of the old branch boiler house into a dining-room from \$1,700 to \$1,400, the finance committee (for the board) has approved the awarding of the contract to him and Mr. Gent has been notified.

The sea wall was finally allowed by the State Commission, and as soon as the necessary arrangements can be made an order will be issued for the work to proceed.

While in Albany I brought the matter of the coal hoist before the State Commission, and the enclosed plans and specifications have been approved by the Commission for advertisement. I would respectfully recommend that your board approve of this plan, for the purpose of advertising, and when the bids are received from the different contractors the board can select the particular apparatus to be installed. The enclosed letter from the State Architect respecting the coal-handling apparatus was received to-day.

The State Architect visited the institution a few days ago and appeared to favor the bid of Messrs. O'Connor & Booth as against Sullivan & Clark in that the former agree to complete the work in ten days less time than the latter, although the latter is the lower bidder by \$57. Sullivan & Clark were the contractors for construction of the new detached building, and they performed their work satisfactorily.

In the matter of the contract for plumbing for Verplanck, detached and annex buildings, I find that the risers as planned

are in some cases too small, i. e., $1\frac{1}{2}$ -inch circulation. I wrote to the State Architect concerning this matter before the plans were drawn up, but in some way the plans were completed with the small risers. I received the enclosed letter from the contractor, Edward Joy, stating that he will make the change to $1\frac{1}{4}$ -inch risers for the sum of \$40. In order to have a satisfactory flow of hot and cold water it will be necessary to have the size increased, and I would recommend that your board approve of this change and the expenditure therefor.

I would call attention to the fact that there is some delay in the matter of excavating for the conduits from the point "A" on the plans to the Verplanck and from the Verplanck to the annex building. In connection with this I would say that there appears to be some confusion about the orders, as I received a letter from the State Architect on June 3d, dated May 24th, enclosing order No. 509 to Messrs. Denniston, Dyer & Co. dated April 16th, in which the architect informs the contractors that he is authorized by the board of managers of Manhattan State Hospital and the State Commission in Lunacy to give them the order for omission of excavating for dining-room building. In my report to the board of March 13th, I informed you that it would be impossible for this hospital to do the work, and a resolution was passed to the effect that the matter be referred to Dr. Macdonald to communicate with Mr. Heins to make such arrangements as might be agreed upon. The board has not yet approved of this work being undertaken by the hospital, inasmuch as there appeared to be an impression that the East Hospital, having more men patients, could do this work for the west side. While at Albany I brought this matter before the Commission and received their approval of an allowance of \$629 for the contractor to excavate for the conduits.

Mr. Dyer, of the firm of Denniston & Dyer, visited the hospital a few days since and asserted that he would not be willing to go on with this work now, as it would cost more to do the excavating than he thought it would.

I enclose a letter from the architect dated May 29th, request-

ing the approval by the board of the expenditure of \$629 to Denniston, Dyer & Co. for excavating for the conduits, the State Commission in Lunacy having already approved thereof.

I also enclose a letter from the architect dated May 28th, informing me that he had sanctioned the omission of an extra new pole between the corridor to the Verplanck dining-room and the next old pole to the south.

I submit herewith a letter from the State Commission in Lunacy dated June 3d respecting a by-law proposed at the conference between the representatives of the State hospitals and the Commission held March 26, 1901. The by-laws reads as follows:

“There shall be charged and become due from every insane person admitted to the State hospital, for care and maintenance, and who is not admitted under a special agreement, the sum of \$3.50 per week, or such other sum as may from time to time be fixed as a general reimbursing rate by the State Commission in Lunacy. Such sum shall be a charge to and due by the persons liable by law for the support of such insane person or by the committee of such insane person and shall be a charge upon the estate of such insane person whenever the same shall vest, or be reduced to possession, by or on behalf of such insane person. It shall not be necessary to make an entry of such charge upon the books of the hospital unless such entry is specially directed by the board of managers.”

The State Commission in Lunacy has approved of the telephone system to be installed by the New York Telephone Company, as approved by your board at the meeting of May 22d.

The graduation exercises of the training school for nurses took place on the afternoon of May 22d, the number of graduates from this hospital being 27. The annual graduation ball followed in the evening and was very much enjoyed by all.

The field day sports, postponed from May 30th on account of the inclement weather, took place yesterday afternoon. A large number of patients, both men and women, including a contingent from the East hospital, attended. Music was furnished by

the Manhattan State Hospital band. The event proved to be of more than ordinary interest and the patients were very enthusiastic.

Yours, respectfully

(Signed)

E. C. DENT

Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, *July 10, 1901*

Hon. HENRY E. HOWLAND, Esq., *President Board of Managers*

Dear Sir.—I have the honor to submit the following report for this hospital, covering the period elapsing since the last meeting of your board. The customary reports and tables have been forwarded to your office and are now on file.

I submit the following bills for your approval:

Special order No. 616 for \$337.90 from the State Architect, in favor of C. V. Collins, Superintendent of State Prisons, for window frames, sash, etc., to be used in building new dining-room at the branch on the foundation of the old boiler house.

Certificate in favor of Denniston, Dyer & Co., for \$2,380 on account of contract for the construction of a dining-room at this hospital.

Certificates in favor of C. A. Sussdorf, one for \$22.50 for services at this institution as inspector during the month of May, and one for \$42.50 for services during the month of June.

Bill of Mr. Lewis Webb amounting to \$22.50 (premium on bond for \$3,000) assumed by him as resident steward in pursuance to a resolution of your board on June 4, 1900.

The advertisement for alterations to the superintendent's residence at this hospital has been inserted in accordance with the request of the Commission in several papers, and the bids will be opened on the 16th instant, at 4 o'clock p. m.

The various contracts which have received your approval are receiving attention by the different contractors in that they are purchasing the materials and getting ready. Sullivan & Clark

are working on the new dining-room at the branch and materials are being delivered.

Denniston, Dyer & Co. have done very little work on the dining-room at the Verplanck since your last meeting. I have written to the architect respecting it. The contractor asserts that the delay was due to the fact that they did not receive stone for the water table. At present they have a few men at work.

Nothing has yet been done towards adjusting the matter of excavating for the conduits, which contract was awarded to Denniston, Dyer & Co. by your board on March 13th, and no action taken by you to rescind this award that I am aware of. The contractor asserts that he has received orders from the architect not to excavate; that the State would accept \$629 in lieu of the excavating. The amount of material to be excavated is something like 75,000 cubic feet of earth. Aside from the extra cost entailed by blasting, which I am quite sure will be necessary, an extra cost in shoring up and caring for the steam pipes while the excavating is in progress will, in my opinion, cost the State in the end twice if not three times this amount allowed the State by the contractor. In pursuance to the request of the State Commission in Lunacy at its meeting in your office on June 25th I wrote to Mr. Dyer asking what allowance he would make for the delay caused him, and I submit herewith his reply. You will observe that he proposes charging the State \$1,439 for this work, which he has already contracted to do for \$629. Aside from this he refuses to assume any responsibility of breakage in steam pipes during the excavating, and also refuses to remove the excavated material.

In this connection I would state that Mr. Heins proposes changing the line of the conduit as originally shown on the plans. This change is a desirable one, as by straightening the line of the conduit twenty-eight feet is gained in the length.

Work on the solarium is progressing. The contractor contends that he will not be able to complete it in the time agreed upon and has made application for an extension of time of one

month. As authorized by your board at the last meeting, the advertisement for supply of fresh and condensed milk was inserted in the newspapers and bids opened on June 21st. A saving of one cent per quart will be saved by this contract. The supplies so far received are up to the standard.

The advertisement for supply of coal has not been inserted for the reason that we are unable to decide whether the Parsons company would install more blowers or not, and this would determine the quantity and quality of coal to be consumed. They have agreed to install the blowers, and with your sanction I will proceed to advertise for bids at once.

Two Fitzgibbons boilers have been received and unloaded. The contractors are now preparing to place them in position in the boiler house.

The matter of the coal hoist, bids for which were opened on June 21st, has not been definitely settled by the State Commission in Lunacy as to the kind of apparatus to be installed. The Commission is of the opinion that the cost of the coal-handling apparatus, as submitted, is too great. I am informed by the Commission that they would approve of an apparatus costing about \$6,000. I wrote to the architect and informed him that the New Jersey Foundry and Machinery Company had submitted a plan which would cost a little less than \$6,000. This bid is at present in the hands of the State Architect. The plan as submitted by this company would unload our coal and the coal for the East Hospital. The architect at present has this matter under consideration.

The sea wall, which was approved by the Commission some time since, is still in the hands of the architect for the reason that he has not yet drawn a contract for the signature of the lowest bidder, who is ready to begin work as soon as such contract can be submitted. The architect asserts that he will draw up the contract in a short time.

The sewer which the contractor disconnected has been left to run into an open gutter. It leaks badly, and as a result several inches of sewage are standing about the foundation of the new

building, which is unsanitary and unsightly. The attention of the architect has been called to this condition several times.

The refrigerating apparatus has not worked as satisfactorily as it should for the reason that the ammonia was lost from leaks in the pipes. Upon investigation it was found that the leaks were due in many instances to defective casts. I notified the company to make an inspection, which they did, and some of the defects were shown. I have not yet received a report regarding them. At present the plant is running well and five tons of ice per day are being regularly made.

The field day sports planned for the Fourth of July were carried out with success. About 1,100 patients attended. Both patients and employees took part in the games, and prizes purchased from the amusement fund were awarded the successful contestants. Refreshments were served. In the evening a display of fireworks was given and was much enjoyed by the patients.

During the exceedingly hot weather an excursion was given to the women patients of this hospital on the steamer "Wanderer" up the sound. It was a brief respite from the scorching heat and was greatly appreciated.

On three days of each week salt-water bathing is given the patients in the sea bath on the east side. On these days about 800 patients enjoy this luxury.

Yours, respectfully
(Signed) E. C. DENT
Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, August 14, 1901

HON. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—I have the honor to submit herewith the following report of this hospital, covering the period elapsing since the last meeting of your board. The customary reports and tables have been forwarded to your office and are now on file.

The following bills are respectfully submitted for your approval:

Special order No. 496 for \$232 from the State Architect in favor of C. V. Collins, Superintendent of State Prisons, for sash to be used in the solarium, tuberculosis ward. Also order No. 508 for \$685.72 from the State Architect for sash, doors, frames, etc., for Verplanck dining-room.

Special order No. 507 for \$590 from the State Architect in favor of Denniston, Dyer & Co. for increasing the size of conduit from dining-room building to annex from 5 feet 6 inches to 7 feet wide.

Special order No. 651 from the State Architect to Peter Keeler for \$1,200, deduction for plumbing in connection with the construction of the Verplanck dining-room, and order No. 652 in favor of R. T. Ford for \$1,200 for the same work. It was learned by the architect that Peter Keeler had sublet this contract to R. T. Ford, and to save the State dealing with Mr. Ford through Mr. Keeler it was deemed wise to give the contract directly to Mr. Ford, thus cancelling the order to Mr. Keeler.

Special order No. 655 for \$40 from the State Architect in favor of Edward Joy for substituting $1\frac{1}{2}$ inches cold and $1\frac{1}{4}$ inches hot water risers instead of those specified in the contract.

Special order No. 658 from the State Architect in favor of Sullivan & Clark for \$35 for increasing the thickness of metal in columns in branch dining-room from one-half inch to three-fourths inch.

Certificate in favor Peter Keeler for \$952 on account of contract for solarium for tuberculosis ward.

Certificates in favor of Denniston, Dyer & Co., one for \$242.25 and the other for \$1,500, on account of contract for the construction of Verplanck dining-room at this hospital.

Certificate in favor of Fitzgibbons Boiler Company for \$3,600.80 on account of contract for installing two 150 horse-power Fitzgibbons boilers.

I submit a letter from the De La Vergne Refrigerating Company in reference to a bill for ammonia. The matter has been

before the State Commission in Lunacy, who referred it to Mr. Austin for report.

The bids for alterations to the superintendent's residence were received, but the lowest bid was deemed excessive by the Commission and the matter is still under consideration.

The bids for coal were opened on July 26th, and the finance committee awarded the contract to Messrs. Parrish, Phillips & Co.

Your attention is called to the fact that the contract for meat expires September 30, 1901.

Separate telephones have been installed on the island, and the telephone has been removed entirely from Blackwell's Island. In case of emergency, through the courtesy of the Department of Charities, Dr. Moseley can communicate with me.

The two Fitzgibbons boilers have been installed, and will probably be turned over to the institution in a short while.

The work on the dining-room for the Verplanck is progressing favorably, but in my opinion the workmanship is not of a superior order.

The excavating of the conduits is being done by the institution. The conduit from the Verplanck to the annex will be ready to turn over to the contractor this week. We have experienced considerable difficulty in excavating this conduit for the reason that bowlders and solid rock were met with, and it became necessary to blast and to prop up the steam pipes, which work was also done by the institution. The conduit south of the Verplanck appears to have met with some opposition on the part of the State Architect, for the reason that he thinks he can introduce a conduit whereby the State would make a financial saving. We have excavated over half of this conduit and removed the dirt from the pipes its entire length, and in case the matter is adjusted and the contractor allowed to go on with the work, we can turn this conduit over to the contractor in a week. The contract for this work has been approved by your board and the State Commission in Lunacy, and the contract duly signed by the contractor.

The work on the branch dining-room is progressing favorably, and the contractor thinks he will finish the work in the allotted time.

The contractor for the solarium informs me that it will be turned over to the institution this week.

The greenhouse has been approved by the State Commission in Lunacy for \$1,570 and an order issued for the glass and frame work. I expect that this will be finished in the early fall.

The work of enlarging the windows in wards 17-21 is progressing very rapidly, and the rooms which were formerly dark and gloomy are being converted into bright and airy rooms.

The sea wall is now in course of erection, and judging from the progress now being made by the contractor, it will be finished in about four weeks. In connection with this work I would state that it is exceedingly difficult to find material enough on the island to fill in, so as to hold the wall firm. I have, however, found several barges of clean dirt and made an offer to unload them on the island. One barge has already been unloaded and we are now working on another. This will also enable us to make the necessary preparations for the reception of the coal and erection of the trestles for the delivery track.

The specifications for the coal hoist were received by me yesterday from the architect, and also a letter from the State Commission in Lunacy, requesting that it be advertised and bids again procured. I have taken steps to have the advertisements inserted at once, and bids opened at the office of the board on Monday, August 26th, at 4 o'clock.

I beg to call the attention of the board to the payment of bills by the East Hospital for material and labor as per bills rendered, in accordance with a resolution of your board on June 5, 1901—from October 1, 1900, to May 31, 1901, inclusive, as follows:

Electricity furnished from November 12, 1900, to May 31, 1901, 92,850 kilowatt hours, at 4 cents, \$3,714.

Refrigeration from October 1, 1900, to and including May 31, 1901, 243 days, at \$2.50 per day, \$607.50.

Laundry work for the months of March, April and May, three months, at \$254, \$762.

The month of March was the first month in which the laundry work of the East Hospital was increased to 90,000 pieces. This gradually increased until in the month of May the work amounted to 130,369 pieces.

Ice furnished from October 1, 1900, to May 31, 1901, inclusive, 107.55 tons, at 80 cents per ton, \$86.04.

Payment should be made of these bills, as well as for the months of July, August and September, before October 1st, at which time the treasurer's report for September will be closed, in order that the West Hospital may receive credit and make deduction for this amount in making its annual statement of expenditures for the year.

The "Mermaid" for some time past has been leaking badly and has been much in need of repairs, but the boat was kept in commission until August 5th. It was necessary to use a pump on her frequently during the night and to use a steam siphon during the day. I telephoned the Commission and explained the case to them and permission was given to have this work done. On July 31st the United States inspectors of steam vessels inspected this boat, and the enclosed letter was received from the custom house on August 6th, in which they recommended the repairs set forth in this letter. I knew the boat was in bad condition and was unsafe, and had invited bids and had specifications drawn up, and as a consequence repairs were ordered in accordance with the specifications, as follows:

Ward & Co., Astoria, L. I., \$350.

Other bids received on this work were as follows:

Tietjen & Lang Dry Dock Company, \$475; Theo. Smith & Sons Company, \$1,150.

Other firms notified to bid who did not care to do so were Gas Engine and Power Company and Chas. L. Seabury Company, Morris Heights, N. Y.; W. A. Fletcher Company, Hoboken, N. J.

In addition to the \$350 it was found necessary to add the following items:

Taking up plank shear and refastening it in place and refastening stem head with bolts, \$10; new rudder stock; lower part

of stem made new; old stem iron removed and made two feet longer, refitted and refastened in place; six new beams on starboard side, and three new knees, \$40; total of contract with Ward & Co., \$400.

Including this extra work, which could not be discovered until after the boat was on dry dock, Ward & Co. are still \$75 under the next lowest bidder.

We received a quotation from this firm of \$75 for certain repairs necessary to the boiler, but on our engineer's statement that he could do the work for much less money, we have purchased a small amount of material and he is now doing the work.

I respectfully ask that the board approve of my action in this matter.

On behalf of the committee on old accounts, I beg leave to submit a letter from Geo. H. Stevens, Deputy Attorney-General, respecting the Fee and Ewing suits.

On Monday, Wednesday and Friday of each week salt-water bathing is given the patients in the sea bath on the east side. About 700 patients enjoy this recreation.

An excursion was given to the women patients on the steamer "Wanderer" down the river as far as the Battery, and it was very much enjoyed by all the patients aboard.

Yours, respectfully
(Signed) E. C. DENT
Superintendent

MANHATTAN STATE HOSPITAL, WEST

NEW YORK, *September 11, 1901*

HON. HENRY E. HOWLAND, *President Board of Managers*

Dear Sir.—The customary reports for the past month have been filed in your office, and I beg to supplement them with the following report concerning this hospital since the last meeting of your board.

The following bills are respectfully submitted for your approval:

Certificate No. 2 in favor of Peter Keeler for \$2,356 for final payment on his contract for solarium for tuberculosis ward.

Certificate No. 1 in favor of Sullivan & Clark for \$2,394.87, and certificate No. 2 for \$3,856.88 on account of their contract for construction of dining-room on site of the old branch boiler house.

Certificate No. 2 in favor of James Curran Manufacturing Company for \$1,055 for final payment on their contract for building four boiler foundations, including a smoke duct to two boilers.

I submit a letter from Mr. J. C. E. Scott, attorney for Contractor Dyer, to Mr. Austin, with a copy of a letter from Mr. Austin to Mr. Scott respecting the contract of Denniston, Dyer & Co. Mr. Scott's letter was sent to the State Commission in Lunacy, and also a letter from me to Mr. Scott, informing him that the matter would be brought before the board at the next meeting.

The bids for the coal hoist were opened on the 26th of August, a tabulation of which was forwarded to the chairman of the finance committee, the State Commission in Lunacy and also to Mr. Heins with the original bids on August 27th. I have spoken to Mr. Heins about this matter and asked him if he would look over the specifications and let us know his conclusions at the very earliest date. So far he has been unable to render an opinion. Some of the bidders asked for the return of their checks, and the architect informed me that the two highest bidders (Mr. A. J. Frith and Mr. George Haiss) being much higher than the three remaining bidders, they were not to be considered, and therefore we could return their checks without complication, which was done.

The solarium for the tuberculosis ward has been completed. The upper ward is now occupied by twenty patients, and the lower ward is used for a sitting-room for all patients who are out of bed. I regard this as a very great addition to the phthysical ward.

The two Fitzgibbons boilers have been installed by the Curran

Manufacturing Company and have been in use for several weeks, and with the exception of a little necessary caulking, the work is satisfactory. The covering will be put on as soon as this caulking is done.

The "Mermaid" has been painted by the hospital, and since it was last repaired has given satisfactory service.

Your attention is respectfully called to the fact that the contract for meat expires on September 30, 1901.

The work on the dining-rooms (the branch and Verplanck) is progressing favorably. I was compelled, however, to write to the architect complaining of the failure on the part of the contractor for the Verplanck dining-room to comply with the specifications in that he used North Carolina pine for No. 1 spruce, and that the floor beams should have been chamfered on the under edges, which has not been done.

The conduit has been about finished and the contractor has begun work on it. Nothing more has been done on the conduit south of the Verplanck for the reason that the architect asserts that nothing can be done permanently until the question regarding the pipes is taken up with the Commission and an allotment made."

I hope during the ensuing month to be able to make a comparative report in the matter of coal No. 1 and coal No. 3, but it is not practicable to do it at present for the reason that the pipes are exposed and from time to time returns are cut off, rendering the supply of heat inconstant.

I enclose a communication from the State Commission in Lunacy respecting a passenger dock at Ward's Island. Their request was complied with and the plan has been sent.

I enclose a letter from Mr. Keller respecting the Blackwell's Island division of this hospital, and also a reply from your secretary. I would state that I saw Mr. Keller in person and he assured me that it would be quite agreeable for the hospital to occupy Blackwell's Island during the month of October, but that they would like to have it after that.

In compliance with an order from the State Commission in

Lunacy, fifteen women patients were transferred from this hospital to Central Islip to fill existing vacancies.

I beg to state that since the last meeting of your board five excursions on the hospital steamer have been given to the patients of this hospital, three for the women and two for the men patients. The total number of patients who enjoyed this recreation was 1,732.

On Labor Day a clam chowder dinner was given to 900 women and 200 men patients, under the trees on the lawns of the hospital, which was very much enjoyed by all who partook of it.

Sea bathing has been kept up as heretofore, the men going in once a week and the women twice, and there have been as many as 2,120 bathers in one week.

We are vaccinating all the patients admitted to the hospital, virus being supplied by the board of health.

Yours, respectfully

(Signed)

E. C. DENT

Superintendent

STATISTICAL TABLES

SPECIAL TABLE No. 1

Medical service

Number of physicians.....	14
Ratio of physicians to patients.....	1 to 202.57
Annual per capita cost of medical service.....	\$7.83

SPECIAL TABLE No. 2

Employees

Number of employees.....	457
Ratio of employees to patients.....	1 to 6.20
Ratio of attendants to patients.....	1 to 9.37
Annual per capita cost of employees.....	\$44.68

SPECIAL TABLE No. 3

Recoveries

Percentages

On number admitted.....	26.50
On average daily population.....	7.57
On whole number treated.....	5.98
On number discharged.....	45.96

SPECIAL TABLE No. 4

Deaths

Percentages

On number admitted.....	29.27
On average daily population.....	8.36
On whole number treated.....	6.60
On number discharged.....	50.76

SPECIAL TABLE No. 5

Statement of the quantities of staple articles purchased from October 1, 1900, to September 30, 1901

Wheat flour, barrels.....	3,519 $\frac{2}{7}$
Meats, fresh, pounds.....	482,965
Meats, salt, pounds.....	96,514
Sugar, pounds	146,364
Coffee, pounds	36,700
Tea, pounds	9,083
Butter, pounds	106,031
Eggs, dozen	46,620
Coal, tons	14,872

SPECIAL TABLE No. 6

Statement showing average purchase price and per capita cost of staple articles of consumption for the period from October 1, 1900, to September 30, 1901

	Average price	Per capita cost
Fresh meats, per pound	\$0.069	\$11.927
Poultry, per pound .....	.111	.381
Wheat flour, per barrel.....	3.341	4.224
Butter, per pound .....	.210	8.014
Cheese, per pound.....	.101	.542
Milk, condensed, per gallon .....	.489	6.122
Milk, cows', per gallon.....	.164	.320
Eggs, per dozen .....	.164	2.755
Tea, per pound.....	.241	.788
Coffee, per pound.....	.118	1.559
Sugar, per pound.....	.053	2.810
Liquor, distilled, per gallon.....	1.720	.030

SPECIAL TABLE No. 7

Fuel and light

Total annual cost.....	\$39,516.21
Annual per capita cost.....	14.194
Number of tons of coal consumed.....	14,872
Average purchase price	\$2.42

REPORT OF INDUSTRIES

MAT SHOP REPORT OF ARTICLES MADE DURING THE
YEAR ENDING SEPTEMBER 30, 1901

Mattresses, new.....	40
Mattresses, remade.....	2,287
Pillows, new.....	28
Pillows, remade.....	4,006
Coir mats.....	111
Rug mats.....	114
Rag mats.....	58
Scrub brushes, new.....	1,875
Scrub brushes, remade.....	1,057
Dust brushes, new.....	217
Dust brushes, remade.....	14
Window brushes, new.....	254
Window brushes, remade.....	6
Nail brushes.....	148
Floor brushes.....	73
Hair brushes.....	293
Chairs caned.....	66
Chairs upholstered.....	7
Couches caned.....	5
Couches upholstered.....	2
Jardinier baskets, rattan.....	27
Waste-paper baskets.....	14
Pay envelopes.....	4,787
Paper bags.....	1,286
Window shades.....	284
Rag carpet woven, yards.....	297
Screens covered.....	15
Head rests.....	35
Cushions.....	31

SEWING ROOM REPORT FOR YEAR ENDING SEPTEMBER 30, 1901

Work Done for Manhattan State Hospital, West

Aprons, muslin	618
Aprons, gingham	52
Aprons, rubber	3
Bags, laundry	68
Bags, laundry, repaired.....	311
Bags, bean	25
Bathing suits	10
Bibs	535
Chemises, muslin	5,073
Curtains, pairs	182
Curtains, repaired	7
Curtains, embroidered, pairs.....	6
Cushion covers, embroidered, pairs.....	16
Coats, men's	377
Coats, men's, repaired.....	118
Overcoats	200
Overcoats, repaired	35
Covers, bureau	337
Drawers, muslin	2,013
Dresses, gingham	3,176
Dresses, cloth	1,699
Gowns, night	2,627
Gowns, hospital	608
Holders, iron	215
Jackets, cooks'	114
Jumpers	594
Oversleeves	173
Overalls	586
Petticoats	438
Pillowcases	2,813
Shirts	7,843
Shrouds	399

Shirts, colored	971
Shirts, white muslin.....	68
Shirts, drill	58
Shirts, night	483
Suspenders	274
Stockings, knit, pairs.....	858
Socks, knit, pairs.....	105
Screens, covered	10
Sacks, dressing	23
Scrub pads	95
Stair pads	24
Tray cloths	1,131
Towels, roller	1,893
Towels, hand.....	4,064
Towels, napkin.....	717
Towels, glass.....	243
Towels, dish.....	2,338
Towels, bath.....	3,432
Ticks, bed.....	220
Tablecloths, embroidered.....	35
Ties, women's.....	1,790
Ties, men's	314
Trowsers, men's.....	404
Trowsers, men's, repaired.....	604
Vests	261
Vests repaired.....	103
Wrappers, flannel.....	24

In addition to the above there were 689,900 articles repaired for Manhattan State Hospital, West.

Work done for Manhattan State Hospital, East

Aprons, cooks'.....	3,638
Shirts, drill.....	2,482
Shirts, Rugby.....	4,049
Shirts, denim.....	1,808

Shirts, hospital.....	673
Shirts, night.....	3,562
Shrouds	351
Suspenders	3,521
Sheets	7,486
Pillowcases	6,331
Towels, roller.....	3,849
Towels, hand.....	3,201
Towels, dish.....	3,700
Towels, bath.....	7,602
Towels, glass.....	1,514
Napkins, table.....	1,233
Tablecloths	474
Ties	86

In addition to the above there were 13,073 articles repaired for Manhattan State Hospital, East.

LAUNDRY REPORT—WORK DONE FOR YEAR ENDING SEPTEMBER 30, 1901

Total number of pieces laundered during the year, 2,594,895. Of this number 864,983 pieces were laundered for the East Hospital.

SPECIAL IMPROVEMENTS

The installing of the electric wires and fixtures for the new detached building, which was under way on the 1st of October, 1900, has been completed.

The following is a list of the special improvements made during the year from October 1, 1900, to September 30, 1901:

Spray baths and lavatories have been installed in wards 32, 33 and 34.

Ninety-four new radiators have been installed in the Verplanck building, wards 11 and 12 and wards 17 to 21, inclusive.

One hot food closet has been purchased and installed in ward 31.

A cement floor has been laid in the passage under ward 15, where food cars are run from kitchen No. 2 to the dining-rooms connected with wards 13, 14, 15 and 16.

A steel ceiling has been placed in the bowling alley.

The heater and hot-water pipes in the staff house have been covered with Keasbey's magnesia covering.

Sixteen sewing machines in the sewing room have been installed on a power table and connected up to operate by electricity.

A general storage refrigerator has been purchased and erected for kitchen in the new detached building.

Two food cars have been purchased for use in carrying meals at the new detached building from the kitchen to the dining-room.

Six hundred yards of cracked stone have been purchased for use on roads and walks.

Three sets of cement steps have been built around the terrace of the new detached building.

The following painting has been done: Interior of wards 31, 32, 33 and 34, interior of staff house, interior of wards 14, 15 and 16, interior and exterior of annex building, exterior of wards 11 and 12, stable and old shop building.

A new water line has been laid to the power-house.

The storeroom in the cold-storage building has been fitted up with shelves, bins and racks for tinware to be used as a general storeroom, and a glass inclosed office has been constructed for the use of the storekeeper and his clerk.

The residence of the superintendent of the Manhattan State Hospital, East, has been connected with the electric line which supplies the East Hospital with light.

Four new fire hydrants have been installed around the new detached building.

A direct current electric light line has been installed from the power-house to the medical offices and the cold-storage building.

One water filter has been purchased and installed in the ice-making room in the cold-storage building.

Four electric flatirons have been installed in the sewing room.

The solarium for the tuberculosis wards 11 and 12 has been erected.

Fifty electric irons have been installed in the laundry.

Alterations have been made in the pump room at the power-house, and the feed and return pumps have been lowered twelve inches, and return line has been repaired.

New feed lines from the pump room to the boilers have been installed.

Twenty-eight hundred feet of $1\frac{1}{2}$ -inch pipe have been installed in the dry room of the laundry to increase the heating surface, which was not sufficient for the work required of it.

Openings for thirty windows have been cut out and the windows built in the sitting-rooms and dormitories of wards 17 and 21, taking the place of the small windows, which did not furnish the required ventilation and light.

A new greenhouse, 100 feet by 25 feet, has been built.

Two 250 horse-power Fitzgibbon boilers have been installed in the power-house.

Twelve radiators have been purchased and installed in the solarium built in connection with wards 11 and 12.

The patients of the hospital have done the work of excavation of the conduits from the Verplanck to the annex buildings, from the Verplanck building to the female attendants' home and from the female attendants' home to the main near the power-house.

The following special work is now under way and not completed:

A dining-room building is being erected at the Verplanck building for the patients and employees.

The old branch boiler house at the south end of the island is being reconstructed into a dining-room for patients and employees.

Plumbing improvements are being made in the Verplanck building, wards 11 and 12 and the annex building.

A sea wall 9 feet high is being built from the coal dock to meet the wall at the south end of the island.

Ashes and dirt are being procured as rapidly as possible from contractors in the city who are removing this material, and it is being used for the filling in and grading back of the wall.

CARPENTER'S REPORT FOR YEAR ENDING SEPTEMBER 30, 1901

Ward's Island

Laid 2,500 feet of yellow pine flooring; built new dumb-waiter and made car for same; made one door frame; built porch and steps; made one transom sash and 72 feet of hand-rail for two stairs; all in wards 11 and 12.

Laid 5,000 square feet of yellow pine flooring in wards 31, 32, 33 and 34. Made one white pine sink for dining-room in ward 31, 7 feet x 18 inches x 18 inches.

Put up 1,000 feet of white pine ceiling in patients' smoking-room.

Laid 400 square feet of yellow pine flooring in waiting-room of stable. Put on seven pairs of gate hangers and tracks and new spruce floor in six box stalls at stable. Made eight pairs of oak shafts for coal carts and five pairs of hickory shafts for wagons.

Made one table 8 feet x 3 feet with one drawer, and closet for bottles for drug store.

Made three white pine trucks 3 feet x 2 feet x 2 feet, one clothes horse, three slat gates, and eight pine brackets for laundry.

Made three window frames and sashes 2 feet 6 inches x 1 foot 6 inches and one pair sashes, circular heads, to replace broken ones under wards 13 and 15. Laid 40 feet flooring in dumb-waiter in wards 13 and 15.

Built office for storekeeper 16 feet x 16 feet. Made four window sashes 6 feet 6 inches x 5 feet 5 inches, with 12 panes in each sash and one glass door 7 feet x 2 feet 8 inches with door frame and trim complete for above office.

Built rack shelves for crockery and tinware and eight bins for cereals, etc., in storeroom.

Made 3 oak book cases 8 feet x 6 feet for superintendent's office. Put ten yale locks on doors of office, etc.

Made two sections of white ash rack shelving for cans, 10 feet long, 5 feet high, 4 feet wide, four shelves in each section at kitchen No. 2. Fitted up pantry with five tiers of white pine shelves 16 feet x 12 feet x $\frac{1}{2}$ inch and closets for keeping stores. Made one pine closet to hold forty pans of bread, two pine sinks for vegetable room 7 feet x 18 inches x 2 feet, one coal bin 6 feet x 3 feet x 3 feet, two slat doors and frames for cellar and one pine table 8 feet x 3 feet, all at kitchen No. 2.

Made three white wood framed china closets for dining-room 7 feet x 5 feet, new building. Put up 500 window shades at new building, made one white wood glass case for surgical instruments, 5 feet x 4 feet, two pine door frames and trim for operating rooms, three small tables for bedrooms, eight framed stands for water coolers and fitted up six clothes rooms with box shelving, all at new detached building.

Fitted and trimmed 30 pairs of new sashes and put in new sash cord and window shades at wards 17 and 21.

Made one circular head sash 5 feet x 3 feet for gardener's tool house. Put in new floor timbers and laid 500 square feet of yellow pine flooring in same house.

Made seven window frames and seven pairs of sashes 4 feet x 2 feet 6 inches, three batten doors and frames and one glass door and door frame, 7 feet x 3 feet, for bowling alley.

Rebuilt old greenhouse and built new addition to same 12 feet x 25 feet. Made eight side ventilating sashes 4 feet x 2 feet. Put up side benches and all necessary work.

Put down 300 feet of white pine baseboard with pine moulding top finish at ward 30.

Made four cake boxes for shipping cake from Blackwell's Island. Made four slat hand barrows and one slat door and frame for cellar at kitchen No. 1.

Made all other necessary repairs to furniture, doors, windows, floors, etc., throughout the institution.

Blackwell's Island

Put up storm doors at pavilion K, made two closets for clothes, etc., in pavilion K, repaired bread knives, repaired snow plough, made three stepladders, repaired ten stepladders, repaired six bed trays, repaired toilet fixtures, put up baseboards in retreat, put up storm windows at pavilions, repaired dumb-waiter in retreat, made twenty-two coffins, put fly screens on windows, made eight bed screens, repaired six clocks, put in door saddles in retreat, hall 9 and pavilions D and E, repaired food wagon, laundry wagon, three ice carts, coal cart, and ice truck in kitchen; made six soap moulds, made fifteen bedboards, made eight covers for barrels in storeroom, put on new locks in retreat, pavilions L and M, storeroom, drug store and halls 9 and 10; repaired knife drawers and bread closets, put six bolts on slop sink doors of retreat, put up clothes hooks in retreat, pavilions L and M, D, E, G, I, K and halls 9 and 10; fitted up stage in amusement hall for concert, made knife and spoon boxes for retreat, hall 9, pavilions L and M; repaired stalls and floors of stable, repaired doors and windows of stable, repaired 200 chairs, 300 benches, 25 bureaus, 10 wardrobes, 20 wash-stands, butcher's block and 10 bed screens; put up stationary benches at retreat and pavilions L and M; repaired fence at retreat, made bread closet for female attendants dining-room, made covers for baker's troughs, put in new drain boards to sinks in pantries of retreat and pavilions, repaired doors, sashes, floors, shades, medicine closets, ice boxes, etc., throughout the institution.

ENGINEER'S REPORT FOR YEAR ENDING SEPTEMBER 30, 1901

Ward's Island

Installed 56 radiators in Verplanck building, wards 11 and 12 and wards 17 to 21, inclusive, and one hot food closet in ward 11.

Installed steam coils in greenhouse, and connected same to high pressure line under ward 17, a distance of about 350 feet, connecting return through traps to return under ward 18.

Put sink in greenhouse, connecting same with hot and cold water and sewer under ward 18.

Changed the heating system of the men's home, abandoning the use of electric fans.

Changed steam and return lines in bowling alley and installed one radiator, three closets, two sinks and two wash basins, connecting same to hot and cold water and to sewer.

Installed six urinals, fourteen basins and three spray baths in wards 32 to 34, the spray baths being made by the department.

Connected up large dish-washing sink in ward 31, and removed two sinks from wards 33 and 34.

Removed one set of coffee urns from ward 34 and installed same in ward 13.

Installed one radiator in cold-storage building.

Changed fire line in men's home to allow the cutting of a door through wall between east and west corridors.

Connected up all steam gauges in power-house with petcocks for blowing through to clean gauge pipes.

Made and installed one sitz bath for ward 26, connected same up with hot and cold water, steam and sewer.

Removed hot air bath from ward 5 and installed same in ward 26.

Made and installed 10 ventilators on annex roof.

Put in and connected with sewer three floor drains near new boilers in power-house.

Reslated roof for stable.

Installed recording pressure gauge at power-house.

Ran new water line from main to power-house, about 200 feet, of 6-inch cast iron pipe. Put on necessary valves and connected up condensing tower to same.

Renewed part of feed lines at power-house.

Installed food elevator in wards 11 and 12.

Installed new lavatory in ward 24. Connected up same with hot and cold water and sewer.

Installed new grates under ten Fitzgibbon boilers.

Made and installed one copper oil pan for compressor engine.
Put tin roof on porch of ward 11.

Changed water line to cold-storage building to prevent freezing.

Installed new range boiler at superintendent's cottage.

Put in new gutter linings wards 17 and 21, and new leaders wards 17, 18 and 21.

Removed four radiators from kitchen No. 2 and installed same in offices. Installed six radiators in wards 1 and 2.

Covered steam and return pipes in basement of wards 13, 14, 17, 18 and 21.

Installed 28 $1\frac{1}{4}$ inch water valves on washing machines in laundry.

Changed Powers' regulator on hot water tank in new building to insure proper regulation.

Installed ejectors in pump pits of men's and women's homes and elevator pit of ward 13.

Installed filter in ice-tank room at cold-storage building.

Removed steam and return pipes between Verplanck and annex buildings to allow the building of food conduit.

Connected drain from refrigerator to sewer kitchen No. 2.

Installed new steam trap in basement of ward 13.

Removed steam and return pipes to ward 21 to allow the construction of the new dining-room building. Reinstalled these lines after the building was erected.

Installed new leaders at wards 1 and 2 and laundry.

Connected up watering trough at stable yard.

Repaired ammonia line to cold-storage building, putting in several new gaskets.

Installed 2,688 feet of $1\frac{1}{2}$ inch pipe in dry room of laundry, and connected same with exhaust from engine.

Installed one new body ironer in laundry.

Installed one new blower in laundry to replace one which was too small for the work.

Installed new leader at porch of staff house.

Lowered and cut up old stack at branch power-house.

Put one extra heating coil in hot-air bath, ward 26.

Installed new pulleys at laundry to reduce the speed of machines which were running too fast.

Made and installed new leader at porch of cold-storage building.

Changed spray baths in women's home from steam to hot and cold water.

Made and installed guards at manholes of tunnel to new building to allow free circulation of air.

Installed two large wooden sinks and one floor drain in basement of kitchen No. 1, connecting same with hot and cold water and the main sewer.

Expanded tubes of boiler of steam launch "Mermaid."

Renewed worn out coils in hot-water heaters at branches, Verplanck and annex buildings.

Made and erected about 50 feet of 8-inch galvanized iron stack for bakery at Blackwell's Island.

Connected drip from steam to return through trap in basement of ward 15.

Tapped new 6-inch water line, and put in four stops and wastes and faucets for lawn sprinklers.

Installed water lines for two new lawn sprinklers at new building.

Made and put in new gutter linings for ward 30.

Made and put on oil protection hood for engine No. 4.

Installed new steam table ward 31.

Extended all sewers from power-house about 65 feet to outside of new sea wall.

The steam line to engine at laundry has been changed to avoid condensation.

Installed extractor in laundry.

Removed one basin from ward 11, and installed same in ward 26.

The sewer from wards 3 and 4 and cold-water supply to church have been changed to allow the building of new conduits.

Changed dampers to hot-air ducts at new building, discontinuing the use of the mixing dampers.

Installed new tin roof on potting room at greenhouse.

Installed temporary spray bath in basement of men's home for men patients.

All valves, traps, pumps, etc., have been generally overhauled and packed to prepare for the winter. All roofs have also been put in good condition.

Blackwell's Island

Repaired boilers No. 1, 2 and 4. Boiler No. 1 had new set tubes, new patch on leg and back end. Boiler No. 2, 18 new tubes, new patch on back end. Boiler No. 4, new rest for grate bars. Repaired steam and water pipes in boiler room, retinned soup, tea and coffee urns in kitchen; repaired kitchen ranges, repaired ovens in kitchens and bakery, repaired steam and water pipes in kitchen, retreat, pavilions L and M, halls 9 and 10, pavilion K and bath house; retinned tea and coffee urns in retreat hall 9 and female attendants' dining-room; repaired water-closets, put in three new traps to water-closets, pavilion D; put in three new traps to water-closets, pavilion E; put in one new trap to water-closet, pavilion I; put in new trap to bath tub, pavilion I; put in new trap to sink in retreat, repaired sewer pipes at pavilions, put in new hot-water pipe at bath house, put in independent hot-water pipe from attic to retreats 3 and 6, repaired gas pipes in retreat, halls 9 and 10, pavilions L and M, K, D, I, G, E, and female attendants' dining-room; repaired stove and stove pipes, repaired ice boxes, repaired steam table in kitchen, repaired tinware for kitchens, connected up-water supply of female attendants' kitchen and male employees' bathroom with pressure tank of Metropolitan Hospital building, repaired bath tubs and sinks in retreat, halls 9 and 10, pavilions L and M, D, I, G, E, K; repaired basins and basin cocks, repaired compression bibbs, put in new flue pipe to bakery ovens, repaired roofs, gutters and leader pipes of retreat, halls 9 and 10, pavilions L and M, K and kitchen.

Made all necessary repairs to steam plant and to the roofs and buildings of the institution.

PAINTER'S REPORT FOR THE YEAR ENDING SEPTEMBER 30, 1901

Ward's Island

Painted outside of window sashes and doors of wards 13, 14, 15 and 16.

Painted 1 wagonette, 11 wagons and 7 carts.

Painted hospital room in female home.

Painted attendants' room in ward 12.

Painted clothes room in wards 23, 25, 26 and 27.

Bronzed 55 radiators in wards 17 to 21.

Bronzed 32 radiators in Verplanck building.

Filled floor of dining-room No. 2.

Varnished 3 new closets for dining-room No. 2.

Painted interior and exterior of greenhouse.

Filled floors of wards 13, 14, 15, 16, 22, 23, 24, 25, 26 and 27.

Painted operating room in ward 24.

Stained and varnished woodwork in storekeeper's office, cold-storage building.

Painted interior of the two cabins and engine room of steam launch "Mermaid."

Painted four bedrooms in ward 17; three bedrooms in ward 21.

Painted all new window frames on the outside, wards 17 and 21.

Painted one closet at power-house.

Painted interior of staff house; interior of wards 14, 15, 16; interior of wards 31, 32, 33 and 34, and of wards 29 and 30.

Painted exterior of annex building, wards 11 and 12, old shop building, lumber yard, stable and shed, fire engine house, all dock buildings and oil house.

Varnished 817 chairs, 86 tables, 75 bedsteads, 37 wardrobes, 23 washstands, 9 lounges, 5 dressing cases and 1 bookcase.

Reset all broken glass throughout the institution.

Blackwell's Island

Painted 22 coffins and 100 benches. Put in glass in retreat, pavilions L and M, D, E, G, I, K, halls 9 and 10, kitchens and bath house.

MASON'S REPORT OF WORK DONE FOR ONE YEAR END-
ING SEPTEMBER 30, 1901*Ward's Island*

Built brick foundation 25x157 feet for greenhouse, laid brick walls in greenhouse, set side partitions and laid tile floor for spray baths in wards 32, 33 and 34, built fifteen catch-basins on various roads and laid drain pipes to same, cut down brick partition wall into ward 24 to enlarge rooms, built piers and set steel girders in the same room; cut through wall and built new doorway in toilet room of bowling alley, built new doorway at ward 11 and built four piers for stoop at same ward, built cess-pool in front of male home, rebuilt tiled fireplaces in ward 6, built and plastered around seven windows south side of bowling alley, built manhole in front of power station for sewer, built three mason's traps under wards 13 and 15 and laid drain pipes to same, drilled holes in walls of laundry and female home for electric wires, built four sets of cement and brick steps around terrace of new building, cut through conduit for water main, rebuilt piers under ward 17, rebuilt foundation of extractor in laundry, built manhole for valve of water main near oil house, built manhole for valve of new water main in rear of power station, put in new drains in conduit of kitchen No. 2, rebuilt chimneys on staff house roof, plastered asbestos covering on steam pipes in basement of ward No. 21, cut through brick wall of sewing-room for switch box, covered boiler of launch "Mermaid" with asbestos, repaired plaster of interior of wards Nos. 13, 14, 15, 16, 31, 32, 33 and 34; built manhole for sewer in front of kitchen No. 2, built manhole in front of annex, bricked up three doorways in wards Nos. 28, 29 and 30; repaired plaster of whole interior of staff house, cut out brick walls and built new windows and set frames in dormitories and sitting-rooms of wards

Nos. 17 and 21, and plastered around all of same; repaired all outside walls of wards 17 and 21, plastered entire interior of wards Nos. 28, 29 and 30, giving the same two coats, one brown and one hard finish; made cement wall plates in greenhouse, made necessary repairs to all wards outside and inside, laid blue-stone flags in front of all stoops of new building, laid stone flags in front of stoop south side of ward No. 11.

Made all necessary repairs throughout the institution on Ward's and Blackwell's islands.

Blackwell's Island

Repaired ceilings in retreat, hall 9, pavilions L, M and I.

Took down ceilings in pavilions D, E, G, I, L and M and halls 9 and 10.

ELECTRICIAN'S REPORT FOR YEAR ENDING SEPTEMBER 30, 1901

Ward's Island

Transferred all telephone lines running north and south to New York city fire alarm poles.

Installed twenty-five lights at bowling alley, telephone station at steward's office, new pole and new transformer at staff house, made and installed new fixture at centre of ward No. 33, centrifugal motor at laboratory, system for lighting subway at new detached building, lights in storeroom doors under shed at dock, light at storeroom pump tank, lights at condensing tower at power-house, extra lights at cold-storage rooms, light at entrance to steward's office.

Ran separate telephone line to power-house and put electric launch telephone on separate circuit.

Reset two decayed poles blown down south of the laundry.

Ran new pole line and installed new telephone at kitchen No. 2.

Put all grounded telephone circuits on metallic return wire.

Installed new light at attendant's room, ward No. 24.

Installed telephone at kitchen No. 1, and call system of buzzers at steward's office.

Reset decayed and broken pole at side of ward No. 17.

Installed lights in new refrigerator at kitchen No. 2.

Installed 4-horse-power, 110 volt-meter and four electric irons at sewing-room, installed lights at patients' smoking-room, electric stove at female home sick room, 5-horse-power C. & C. motor for pipe cutting machine at steam fitters shop, light at butcher shop scales, connections and wires for stereopticon at annex building, new system of lights on metal ceiling at bowling alley.

Ran new direct current line from power-house to new detached building and installed on same a one-quarter horse-power motor for X-ray machine at ward No. 26.

Ran new and separate high tension line to residence of superintendent, Hospital, East.

Installed new lights in potato cellar.

Ran separate line to steward's office telephone.

Installed stage and foot lights at annex recreation room for entertainment.

Installed new transformer at power-house, also ran new direct current wires from power-house to main office and cold-storage building.

Installed telephone at passenger dock.

Reset poles and installed heavy capacity wires on same south of the laundry for current for 50 electric irons.

Ran pole line for telephone from office of Hospital, West, to office of Hospital, East.

Installed electric stove at drug store.

Installed electric lights in basement of dynamo room at power-house.

Removed one 5-horse-power motor from plumbing shop and installed same in laundry, installed one 15-horse-power motor in laundry.

Installed at plumber's shop one 7½-horse-power motor for pipe-cutting machine, lights at new solarium at wards 11 and 12, new

telephone systems at ward 23 and laundry and lights in attendant's rooms, wards 17 and 21.

FARM AND GARDEN PRODUCTS—YEAR ENDING SEPTEMBER 30, 1901

Apples, quarts	31
Asparagus, bunches	200
Apples, crab, bushels	3
Beets, bushels	316½
Beets, tops, barrels	20
Beans, string, bushels	364½
Beans, wax, bushels	30
Beans, lima, bushels	71
Basil, sweet, bunches	1
Brussels sprouts, bushels	1½
Cabbage, heads	4,790
Carrots, bushels	272½
Corn, sweet, ears	25,809
Celery, bunches	1,168
Cauliflower, heads	893
Currants, quarts	67
Cherries, quarts	15
Cucumbers, bushels	6½
Eggs, dozen	529½
Egg plants	60
Grapes, quarts	3
Gooseberries, quarts	31
Kale, bushels	140
Kohlrabi, bushels	10¼
Lettuce, heads	27,131
Leeks, bunches	21
Milk, quarts	10,204
Melons, water	38
Melons, musk	485
Mint, bunches	9
Onions, bushels	55¼

Okra, bushels	7
Oyster plant, quarts	576
Peppers, bushels	8
Pears, quarts	11
Peaches, bushels	101 $\frac{1}{2}$
Pumpkins	66
Parsley, bushels	49 $\frac{3}{4}$
Peas, bushels	100
Parsnips, bushels	147 $\frac{1}{4}$
Raspberries, quarts	67
Rhubarb, bunches	298
Radishes, bushels	183 $\frac{3}{4}$
Squash	963
Spinach, bushels	99 $\frac{1}{2}$
Strawberries, quarts	860
Turnips, bushels	194 $\frac{1}{4}$
Turnip tops, barrels.....	75
Tomatoes, bushels	375
Tomatoes, strawberry, bushels	5 $\frac{3}{4}$

FARM STOCK

Horses	17
Cows	4
Sheep	2
Chickens	200

GENERAL INFORMATION DIRECTORY—MANHATTAN STATE
HOSPITAL, WEST

E. C. Dent, M. D.....Superintendent

All official communications with regard to the Manhattan State Hospital, West, should be addressed to the superintendent.

Post-office address, Ward's Island, Station U, New York city.
Telephone No. 1869 Harlem.

WARD'S ISLAND DIVISION

Accessible by steamer from foot of East One Hundred Sixteenth street 1 p. m.

Visiting days—Mondays, Tuesdays, Fridays and Saturdays.

Visiting hours 1 to 3 p. m.

VISITING OF PATIENTS

Extracts from Regulations

"The superintendent shall regulate and determine the times at which patients may be visited by their friends, and no visitor shall be allowed to see a patient without his consent."

"Friends of patients will be allowed to see them when their condition permits of it, but each patient may only be visited once in two weeks, unless special permission is given by the superintendent, on account of the patient's illness, or for other sufficient reason."

"Visitors will not be admitted on Sundays, unless by special pass from the superintendent, and then only from 1 p. m. to 3 p. m."

"Visitors are expressly forbidden to furnish money, wine, liquor or tobacco to any inmate of the hospital, or to deliver to or receive from a patient any letter, parcel or package, without the knowledge and permission of the medical superintendent."

"No attendant shall receive any perquisite or present from any patient, or friend of a patient, or sell to or buy anything from a patient."

"The physicians attached to the hospital will attend in the offices at the usual visiting hours, and will cheerfully and fully answer all questions addressed to them, as to the conditions and prospects of the different patients. Friends of patients are requested to apply to the physicians for information, and not the attendants, who are not qualified to judge of such matters. Letters of inquiry should be addressed to the superintendent, and will be promptly answered."

"Friends of patients should give notice of any change of residence, in order that they may be notified without delay in the event of the patient's death."

"Visits from other than relatives of patients will only be permitted when satisfactory evidence is presented that such visits have the sanction of the patient's nearest relative."

"Visits from committees of lodges or benevolent societies, made with a view of testing a patient's sanity, will on no account be permitted. The superintendent will certify as to the patient's condition whenever such certification is needed."

"Visitors of all kinds must first apply at the office of the superintendent, and are forbidden to enter the wards or other parts of the hospital buildings in any other way."

ADMISSIONS

The following rule must be observed in the removal of patients to the Manhattan State Hospital:

1. Patients must be in a condition of bodily cleanliness.
2. Patients must be provided with the following:
 - (a) One full suit of underclothing.
 - (b) One full suit of outer clothing, including headwear, boots or shoes.

Between the last day of October and the last day of March there shall be provided, in addition to the foregoing, a suitable overcoat for men patients, and a suitable shawl or cloak for

women patients; also gloves. Considering the great danger always present of the introduction of contagious or infectious diseases into institutions where large numbers of people are congregated, and to avoid, as far as possible, the introduction of such diseases by means of wearing apparel, the clothing referred to above must in all cases be new.

CORRESPONDENCE OF PATIENTS

Each patient is permitted to write to some relative or friend once in two weeks, and oftener, if necessary, in the discretion of the superintendent. In the case of patients unable from any cause to write, the superintendent directs some proper person to write for such patients at suitable intervals if they so desire. All letters are forwarded at once, unless they are obscene, profane, illegible, or too incoherent to be understood, and the postage is furnished by the hospital.

Letters detained for the reasons stated above are forwarded at once to the office of the State Commission in Lunacy.

Letters addressed to the Governor, Attorney-General, judges of courts of record, district attorneys, or the State Commission in Lunacy, are forwarded without examination.

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900.....	199	2,533	2,732
Admitted during year ending Sept. 30, 1901 ...	9	787	796
On original commitments:			
From residences		721	721
By transfers from county houses.....		42	42
By transfers from other institutions for insane.	9	24	33
Total number under treatment during year.	208	3,320	3,528
Daily average population	199	2,585	2,784
Capacity of institution			2,200
Discharged during the year:			
As recovered.....	3	208	211
As improved.....	2	201	203
As unimproved.....		39	39
As not insane		6	6
Died	3	230	233
Whole number discharged during the year....	8	684	692
Remaining October 1, 1901	200	2,636	2,836

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening.....	1896
Total acreage of ground and buildings.....	126
Value of real estate, including buildings.....	\$2,352,000 00
Value of personal property.....	135,000 00
Acreage under cultivation.....	45
<hr/>	
Receipts during year, maintenance fund:	
Deficit October 1, 1900.....	\$36 38
<hr/>	
From State treasury for maintenance on estimates 1 to 12 inclusive.....	\$409,725 00
From private patients.....	
From reimbursing patients.....	5,412 92
From all other sources.....	2,381 18
<hr/>	
Total receipts for maintenance.....	\$417,519 10
<hr/>	
Total receipts from State Commission in Lunacy for extraordinary improvements.....	\$68,657 29
<hr/>	
Disbursements during the year for maintenance:	
Estimate No. 1, for officers' salaries.....	\$24,815 38
Estimate No. 2, for wages.....	124,376 52
Estimate No. 3, for provisions and stores.....	152,221 63
Estimate No. 4, for ordinary repairs.....	6,385 28
Estimate No. 5, for farm and grounds.....	3,382 87
Estimate No. 6, for clothing.....	17,781 20
Estimate No. 7, for furniture and bedding.....	7,028 81
Estimate No. 8, for books and stationery.....	2,883 63
Estimate No. 9, for fuel and light.....	39,516 21
Estimate No. 10, for medical supplies.....	2,743 46
Estimate No. 11, for miscellaneous expenses....	26,114 19
Estimate No. 12, for transportation.....	848 36
<hr/>	
Total disbursements, estimates 1 to 12 inclusive	*\$408,097 54
<hr/>	

* From the above amount should be deducted \$3,131.32, the amount of bills rendered to Manhattan State Hospital, East, for electricity, laundry, refrigeration and ice, leaving the actual cost of maintenance, estimates 1 to 12, \$399,965.72.

Table 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	\$68,657 29
<hr/>	
Balances October 1, 1901:	
General maintenance fund.....	\$3,798 57
<hr/>	
Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive.....	\$2.755
<hr/>	
Maximum rate of wages paid attendants:	
Men, per month.....	\$35 00
Women, per month.....	30 00
<hr/>	
Minimum rate of wages paid attendants:	
Men, per month.....	\$20 00
Women, per month.....	14 00
<hr/>	
Proportion of day attendants to average daily population	1 to 12.15
Proportion of night attendants to average daily population	1 to 40.94
Percentage of daily patient population engaged in some kind of useful occupation.....	\$1.14
<hr/>	
Estimated value of farm and garden products during the year.....	\$4,152 72
Estimated value of articles made or manufactured by patients during the year.....	\$32,327 96
<hr/>	

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.)		77	77	.....	11	11	6
Mental strain, worry and overwork (not included in above)		40	40	.....	2	2	3
Religious excitement		6	6	.....	2	2	1
Love affairs (including seduction)		19	19	.....	2	2	2
Fright and nervous shock.		17	17	.....		
Physical:							
Intemperance		32	32	.....	7	7	1
Venereal diseases		2	2	.....		
Masturbation		3	3	.....		
Sunstroke		9	9	.....		
Accident or injury		4	4	.....		
Parturition and puerperium		27	27	.....	2	2	2
Lactation		10	10	.....			1
Change of life		16	16	.....	2	2	
Fevers		2	2	.....		
Privation and overwork		27	27	.....	3	3	2
Epilepsy		16	16	.....	2	2	3
Old age		18	18	.....	1	1	
Epidemic influenza		6	6	.....	1	1	1
Abuse of drugs		1	1	.....		
All other bodily disorders and ill health.		27	27	.....	4	4	
Heredity		9	9	.....	9	9	
Congenital defect		9	9	.....	1	1	
Unascertained	9	404	413	2	42	44	45
Not insane		6	6	.....			1
Total	9	787	796	2	91	93	68

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious . . .	3	.....	3	34	5	24
Mania, acute	91	51	16	1,703	462	350
Mania, recurrent	22	9	2	281	100	32
Mania, chronic	57	6	14	555	12	150
Melancholia, acute	235	122	33	3,893	822	635
Melancholia, simple . . . . .	.....	.....	.....	16	8	.....
Melancholia, chronic	152	20	31	1,191	39	302
Alternating (circular) in- sanity	2	.....	.....	9	.....	.....
Paranoia	20	.....	1	80	.....	3
General paralysis	51	.....	25	358	.....	214
Dementia, primary . . . . .	.....	.....	.....	46	7	16
Dementia, terminal	141	.....	105	1,933	.....	1,078
Epilepsy with insanity . . .	3	1	2	109	1	29
Imbecility with maniacal attacks	12	2	1	136	2	14
Idiocy	1	.....	.....	29	.....	4
Not insane*	6	.....	.....	25	.....	.....
Total	796	211	233	10,398	1,458	2,851

* Includes cases of alcoholism, drug habit, etc.

C.P. = 6.40%

TABLE No. 6
Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	2	70	72	1	.....	1	2	585	587	1	37	38
One to three months	40	40	1	53	54	.....	256	256	1	349	350
Three to six months	17	17	.....	61	61	.....	95	95	.....	437	437
Six to nine months	15	15	.....	33	33	.....	63	63	.....	261	261
Nine months to one year	3	3	.....	16	16	.....	13	13	.....	142	142
One year to eighteen months	15	15	.....	26	26	.....	44	44	.....	125	125
Eighteen months to two years	2	2	.....	3	3	.....	32	32
Two to three years	9	9	.....	7	7	.....	28	28	.....	37	37
Three to four years	3	3	.....	8	9	.....	13	13	.....	22	23
Four to five years	1	2	3	.....	2	2	.....	7	8	.....	5	5
Five to ten years	3	3	.....	.....	.....	.....	12	12	.....	6	6
Ten to twenty years	6	6	.....	6	6	.....	12	12	.....	2	2
Not insane *	25	25	.....	25	25
Unascertained	31	31	.....	.....	.....	.....	324	324	.....	.....	.....
Total	3	208	211	3	208	211	3	1,480	1,483	3	1,480	1,483

* Includes cases of alcoholism, opium habit, etc.

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases :						
Typhoid fever.....					1	1
Mumps.....					1	1
Influenza.....					31	31
Cerebro-spinal meningitis.....					1	1
Erysipelas.....					14	14
Septicemia and pyemia.....		1	1		8	8
Dysentery.....					2	2
Syphilis.....		1	1		3	3
Tuberculosis.....		47	47		824	824
Constitutional diseases :						
Rheumatism (or rheumatic affec- tions).....					1	1
Arthritis Deformans.....		1	1		1	1
Diabetes mellitus and diabetes insi- pidus.....					1	1
Scurvy, purpura and haemophilia..					6	6
Diseases of the digestive system :						
Diseases of the stomach.....		1	1		15	15
Diseases of the intestines.....		9	9		182	182
Diseases of the liver.....		2	2		16	16
Diseases of the peritoneum.....					15	15
Diseases of the respiratory system :						
Diseases of the bronchi.....					30	30
Diseases of the lungs.....	1	25	26	1	247	248
Diseases of the pleura.....					8	8
Diseases of the circulatory system :						
Diseases of the pericardium.....		13	13		33	33
Diseases of the heart.....	1	13	14	1	240	241
Arterio-sclerosis.....					1	1
Aneurism.....					5	5
Diseases of the blood and ductless glands:						
Anemia, pernicious anemia and leukemia.....		2	2		3	3
Exophthalmic goitre.....					2	2
Diseases of the genito-urinary system.....		13	13		150	150

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Diseases of the nervous system:						
Diseases of the nerves.....					12	12
Diseases of the spinal cord.....					12	12
Diseases of the meninges.....		2	2		17	17
Organic diseases of the brain (tumor, abscess, embolism, throm- bosis, hemorrhage and other gross lesions).....		10	10		152	152
Functional nervous diseases (paraly- sis agitans, chorea, eclampsia, hysteria, neurasthenia).....					50	50
Epilepsy.....		5	5		23	23
Mental diseases:						
Exhaustion of acute mental disease.....		21	21		192	192
Exhaustion of chronic mental dis- ease.....		7	7		62	62
General paralyeis of the insane.....		21	21		173	173
The intoxications; heat-stroke; obesity:						
Alcoholism.....					1	1
Heat-stroke.....	1		1	1	1	2
Debility of old age.....		31	31		251	251
Accident.....					1	1
Suicide.....		1	1		3	3
Surgical and gynecological diseases and diseases of the skin.....		4	4		24	24
Malignant new growths or cancer.....					33	33
Total.....	3	230	233	3	2,848	2,851

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during
the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	1	24	25	4	246	250
Maternal branch	1	36	37	2	363	365
Paternal and maternal branches .....	....	3	3	...	19	19
Collateral branches.....	....	25	25	3	797	800
No hereditary tendency..	5	630	635	80	6,489	6,569
Unascertained	2	69	71	120	2,275	2,395
Total	9	787	796	209	10,189	10,398

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single	6	328	334	138	3,931	4,069
Married	3	312	315	55	4,123	4,178
Widowed		137	137	6	2,005	2,011
Divorced		4	4	.....	41	41
Unascertained		6	6	10	89	99
Total	9	787	796	209	10,189	10,398

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate		5	5	.....	31	31
Academic		9	9	.....	82	82
Common school	4	317	321	94	1,699	1,793
Read and write	5	297	302	49	5,552	5,601
Read only		9	9	12	445	457
No education		99	99	21	1,497	1,518
Unascertained		51	51	33	883	916
Total	9	787	796	209	10,189	10,398

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901				SINCE OCTOBER 1, 1888							
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month	39	39	.....	46	46	.....	499	499	.....	586	586
One to three months.....	29	29	.....	42	42	.....	319	319	.....	393	393
Three to six months	11	11	.....	23	23	.....	147	147	.....	282	282
Six to nine months	1	11	12	.....	8	8	1	146	147	.....	196	196
Nine months to one year	1	1	3	20	23	.....	61	61	3	171	174
One year to eighteen months..	14	14	.....	10	10	.....	133	133	.....	262	262
Eighteen months to two years.	3	3	.....	7	7	.....	47	47	.....	106	106
Two to three years	13	13	.....	16	16	.....	156	156	.....	222	222
Three to four years.....	4	4	.....	12	12	.....	61	61	.....	164	164
Four to six years.....	5	5	.....	14	14	.....	65	65	.....	140	140
Six to ten years.....	7	7	.....	11	11	.....	62	62	.....	126	126
Ten to twenty years	1	1	.....	16	16	.....	33	33	.....	146	146
Twenty years and over.....	5	5	.....	33	33	.....	54	54
Unascertained	2	92	94	.....	.....	.....	2	1,086	1,088	.....	.....	.....
Total	3	230	233	3	230	233	3	2,848	2,851	3	2,848	2,851
Average duration of insane life (giving years and tenths)	1.2	7.4	8.6	..	.....	.....	1.2	6.9	8.1

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 5 to 10 years						
From 10 to 15 years		1	1		31	31
From 15 to 20 years		29	29	9	564	573
From 20 to 25 years	2	102	104	30	1,363	1,393
From 25 to 30 years	2	120	122	46	1,567	1,613
From 30 to 35 years	2	127	129	47	1,430	1,477
From 35 to 40 years	1	90	91	25	1,208	1,233
From 40 to 50 years	1	155	156	32	1,797	1,829
From 50 to 60 years	1	80	81	18	1,046	1,064
From 60 to 70 years		47	47	2	679	681
From 70 to 80 years		33	33		381	381
From 80 to 90 years		3	3		98	98
From 90 to 100 years					8	8
Over 100 years					2	2
Unascertained					15	15
Total	9	787	796	209	10,189	10,398

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years	1	17	18	1	161	162
From 20 to 30 years		85	85		640	640
From 30 to 40 years	2	57	59	2	392	394
From 40 to 50 years		33	33		191	191
From 50 to 60 years		13	13		55	55
From 60 to 70 years		3	3		16	16
From 70 to 80 years						
Total	3	208	211	3	1,455	1,458

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....					5	5
From 15 to 20 years.....		2	2		74	74
From 20 to 25 years.....		7	7		209	209
From 25 to 30 years....		23	23		263	263
From 30 to 35 years.....		23	23		293	293
From 35 to 40 years.....		29	29		314	314
From 40 to 50 years.....	1	42	43	1	532	533
From 50 to 60 years.....	2	40	42	2	425	427
From 60 to 70 years.....		30	30		374	374
From 70 to 80 years.....		28	28		265	265
From 80 to 90 years....		6	6		80	80
Ninety and over.....					10	10
Unascertained					4	4
Total	3	230	233	3	2,848	2,851

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month	2	167	169
One to three months		126	126
Three to six months		49	49
Six to nine months	1	59	60
Nine months to one year		11	11
One year to eighteen months		55	55
Eighteen months to two years		5	5
Two to three years	2	45	47
Three to four years		27	27
Four to five years		11	11
Five to ten years		47	47
Ten to fifteen years		12	12
Fifteen to twenty years		4	4
Twenty to thirty years		4	4
Not insane*		6	6
Unascertained	4	159	163
Total	9	787	796

* Includes cases of alcoholism, morphia habit, etc.

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.....		63	63
One to three months.....	4	87	91
Three to six months.....		137	137
Six to nine months.....	5	108	113
Nine months to one year.....		106	106
One year to eighteen months.....	191	223	414
Eighteen months to two years.....		142	142
Two to three years.....		241	241
Three to four years.....		254	254
Four to five years.....		165	165
Five to ten years.....		598	598
Ten to fifteen years.....		281	281
Fifteen to twenty years.....		112	112
Twenty to thirty years.....		88	88
Thirty years and upwards.....		31	31
Total.....	200	2,636	2,836

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.....				3	34	37
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.....	1		1	13		13

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Agricultural and pas- toral:						
Farmers, gardeners, herds- men, etc.....				6		6
Mechanics at out- door vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....				44		44
Mechanics, etc., at se- dentary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.....	5		5	39		39
Domestic service:						
Waiters, cooks, servants, etc.....		351	351	5	5,721	5,726
Educational and high- er domestic duties:						
Governesses, teachers, stu- dents, housekeepers, nurses, etc.....		228	228	1	2,194	2,195
Commercial:						
Shopkeepers, saleswomen, stenographers, type- writers, etc.....		6	6		168	168
Employed in seden- tary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, etc.....		105	105	13	981	994
Miners, seamen, etc.....				5		5
Prostitutes.....					10	10
Laborers.....	3		3	58		58
No occupation.....		97	97	15	930	945
Unascertained.....				7	151	158
Total.....	9	787	796	209	10,189	10,398

TABLE No. 18

Showing the nativity of patients admitted during the current year and
since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Armenia					1	1
Austria	1	28	29	4	246	250
Australia					1	1
Bavaria					8	8
Belgium					6	6
Bohemia		10	10	1	96	97
Brazil					1	1
Burmah					1	1
Canada		3	3	1	82	83
Cuba					11	11
Denmark		2	2	2	16	18
England	1	22	23	5	318	323
Finland		2	2		15	15
France		5	5	3	114	117
Galatia					1	1
Germany	3	106	109	56	1,532	1,588
Holland		1	1		12	12
Hungary		14	14	3	178	181
Ireland	2	191	193	64	3,191	3,255
Italy		22	22	8	217	225
Macedonia					1	1
Malta					1	1
Mexico					1	1
Newfoundland					4	4
Norway		2	2		18	18
Portugal					1	1
Prussia					4	4
Roumania		1	1		27	27
Russia and Poland		56	56	5	627	632
Saxony					3	3
Scotland		7	7	2	89	91
Spain					1	1
Sweden		6	6	3	135	138
Switzerland		5	5	1	80	81
Syria		2	2		2	2
Turkey					4	4
United States	2	300	302	48	3,091	3,139

Table No. 18—(Concluded)

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
United States of Colombia.....					2	2
Wales					19	19
West Indies		2	2	3	12	15
Unascertained					20	20
Total	9	787	796	209	10,189	10,398

Of the total number admitted since the 1st of October, 1888, the parents of 85.32 per cent were both of foreign birth.

In 1.7 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 1.4 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany.....			
Allegany.....			
Broome.....			
Cattaraugus.....			
Cayuga.....			
Chautauqua.....			
Chemung.....			
Chenango.....			
Clinton.....			
Columbia.....			
Cortland.....			
Delaware.....			
Dutchess.....			
Erie.....			
Essex.....			
Franklin.....			
Fulton.....			
Genesee.....			
Greene.....			
Hamilton.....			
Herkimer.....			
Jefferson.....			
Kings.....			
Lewis.....			
Livingston.....			
Madison.....			
Monroe.....			
Montgomery.....			
Nassau.....			
New York.....	784		784
Niagara.....			
Oneida.....			
Onondaga.....			
Ontario.....			
Orange.....			
Orleans.....			
Oswego.....			
Otsego.....			
Putnam.....			
Queens.....	1		1
Rensselaer.....			
Richmond.....	9		9
Rockland.....			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
St Lawrence
Saratoga
Schenectady
Schoharie
Schuyler
Seneca
Steuben
Suffolk	1	.....	1
Sullivan
Tioga
Tompkins
Ulster
Warren
Washington
Wayne
Westchester	1	.....	1
Wyoming
Yates
Soldiers' Home
Total	796	.....	796

TABLE No. 20

Showing the residence by counties and classification of patients remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany						
Allegany						
Broome						
Cattaraugus						
Cayuga						
Chautauqua						
Chemung						
Chenango						
Clinton						
Columbia						
Cortland						
Delaware						
Dutchess		4	4			
Erie						
Essex						
Franklin						
Fulton						
Genesee						
Greene						
Hamilton						
Herkimer						
Jefferson						
Kings						
Lewis						
Livingston						
Madison						
Monroe						
Montgomery						
New York	200	2,617	2,817			
Niagara						
Oneida						
Onondaga						
Ontario						
Orange						
Orleans						
Oswego						
Otsego						
Putnam						
Queens		1	1			
Rensselaer						
Richmond		8	8			
Rockland						
St Lawrence						

Table No. 20—(Concluded)

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Saratoga						
Schenectady						
Schoharie						
Schuyler						
Seneca		1	1			
Steuben						
Suffolk		1	1			
Sullivan						
Tioga						
Tompkins						
Ulster						
Warren						
Washington						
Wayne						
Westchester		4	4			
Wyoming						
Yates						
Unascertained						
Total	200	2,636	2,836			

SECOND ANNUAL REPORT
OF THE
MANAGERS
OF THE
MANHATTAN STATE HOSPITAL
AT CENTRAL ISLIP
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

**ANNUAL REPORT OF THE MANHATTAN STATE HOSPITAL AT
CENTRAL ISLIP**

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C. G. BRINK, M. D.....	Assistant Physician
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E. T. MURRAY, M. D.....	Medical Interne
W. J. McKEE.....	Resident Steward

REPORT OF THE SUPERINTENDENT

CENTRAL ISLIP, *October 1, 1901*

Hon. HENRY E. HOWLAND, *President, etc.*

Dear Sir.—I respectfully submit to your board, as is required by law, my report as superintendent of Manhattan State Hospital at Central Islip for the year ending September 30, 1901. It will, with that of your treasurer, supplement the report of your board and constitute the second annual report of this as a separate hospital.

MOVEMENT IN POPULATION

On October 1, 1900, there were remaining in the hospital 855 men and 388 women, a total of 1,243. During the year we received by transfer from Ward's Island 81 men and 25 women, a total of 106.

The discharges during the year included 10 men and 4 women, a total of 14.

Forty deaths occurred during the year, of which 30 were men and 10 women, leaving a resident population on October 1, 1901, of 896 men and 399 women, a total of 1,295.

The total number under treatment during the year was 936 men and 413 women, a total of 1,349. The average number under treatment during the year was 897 men and 392 women, a total of 1,289.

AMUSEMENTS

During the year the amusement of patients has received the usual attention, and I believe even better results have been obtained than ever before.

On Decoration, Independence and Labor days field-day sports were held upon the athletic grounds of the hospital, a large number of both men and women patients taking active part. Upon each occasion refreshments, consisting of lemonade, cake,

candy and ice cream, were served, and the winners of events were awarded prizes.

The hospital band and orchestra have increased somewhat in numbers during the year, and the concerts given triweekly by them have added very materially to the enjoyment of the patients. They have also furnished music for our weekly dances, ball games and field-day sports.

During the year the amusement hall, which was remodeled from one of the old wards of group D, has been completed and is now used for our entertainments, dances, concerts and religious services.

Theatrical entertainments have been given from time to time by talent furnished from entertainment bureaus. We are indebted to the Misses Wiser, Velsor and several other young ladies of Islip, who presented upon February 22d a three-act farce entitled "The Jack Trust," and also to the Actors' Bohemia Club, of St. James, Long Island, who, upon July 17th entertained us with a vaudeville programme.

Our baseball team has served as a means of great enjoyment to a majority of the patients. Games were played upon the hospital grounds on Saturday afternoons, and these games were attended by large numbers of both men and women patients. Music on these occasions was furnished by the hospital band.

The semi-military inspection of men patients and attendants has been continued on Sunday afternoons during the year and has now reached a high degree of efficiency.

Weekly dances have been held which both the men and women patients attended. These dances have been very successful and have been thoroughly enjoyed by all attending.

The librarian reports an increase in the number of books issued to the various wards. Current periodicals and newspapers collected from various sources have been supplied for the entertainment of our patients.

OCCUPATION

Experience has shown the necessity of suitable occupation for the patients, not only from the economic but from the medical standpoint, and on these lines every effort is made here to provide suitable work for our patients.

The large amount of grading and road making made necessary by our extensive scheme of improvement has been done entirely by patients' labor. The contrast between the improved and unimproved portions of our grounds shows the results of properly directed labor. Our greenhouses and gardens, both fruit and vegetable, have been conducted along these lines, and though we suffered considerably at the beginning of the season, the results have been quite satisfactory.

At the Suffolk County Fair, held at Riverhead September 17th to 20th, our exhibit of farm and garden produce received honorable mention and diploma.

Farming is our main outdoor industry, and this branch of labor is carefully taught and practiced.

The work of the dining-room service is done entirely by patients, and is both satisfactory and efficient.

In our shoe shop 10 patients are employed, who have been able to supply the demands of the hospital in the matter of footwear.

Patients employed in the mat, brush and broom shop manufacture sufficient to meet the requirements of the hospital.

A number of patients are employed in the tailor shop, where a large proportion of all repairing is done and most of the clothing made for our men patients.

The strain on our old bakery is soon to be relieved by the opening of a large modern building devoted exclusively to this purpose. In our old shop we have 10 patients employed.

The sewing-rooms have done a vast amount of work during the past year. Here we made all bed linen, mattresses, pillows, etc., required for groups 3 and 4 of the new colony, besides making all clothing required for the old colony. The average percentage of patients employed throughout the year was 85.

CHANGES IN MEDICAL STAFF

Dr. H. R. Humphries resigned November 1, 1900, as junior physician. Dr. James L. Devlin resigned November 22, 1900, as medical interne. Dr. Robert W. Fowler was appointed December 3, 1900, as junior physician. Dr. Edward T. Murray was appointed as medical interne January 15, 1901.

MEDICAL SERVICE

This hospital is for the chronic insane only, and the treatment is chiefly diversion, manual training and occupation. By engaging this class of insane in suitable work and directing their attention to rational matters we find profitable outlets for their morbid motor energy and turn their restless movements into natural, and, at the same time, paying channels. We find exceedingly few patients so far advanced in dementia or so much disturbed that they cannot be trained to perform certain simple work. We regard idleness among our patients an encouragement of their disease, which calls for treatment by active occupation, and when this occupation is properly systematized and diversified it is oftentimes of greater consequence than drug treatment.

The assistant physicians, duly considering the mental and physical condition of the individual patient, assign him to such employment as is best suited to his ability and needs and the requirements of his disease.

During the year we had to contend with no epidemics and with but few acute disorders.

Out of 40 deaths, 32 resulted from chronic and incurable diseases which terminate fatally with advancing age. Fifty per cent of deaths occurred in those over 50 years of age. The percentage of deaths on the whole number treated was 2.9.

TRAINING SCHOOL

The training school has been conducted with gratifying results, greatly advancing the value of the nurses to the hospital by adding to their knowledge and understanding of the cases

they are called upon to care for. Four nurses, constituting the senior class, passed the final examinations, the general average being very satisfactory.

The training school consists of a two years' systematic course of training divided into lectures, recitations and practical demonstrations in general nursing and hygiene, and the special care of nursing of the insane given by the superintendent and the medical staff. In addition, clinical instruction is given at the bedside and in the wards in massage, bandaging and in the preparation and administration of food to the sick by members of the medical staff, with the assistance, in special subjects, of the supervisors and hospital chef.

The entrance examination is held at the beginning of the course to determine the applicant's efficiency and fitness for the work. Other examinations are held at various times during the course, with the final examination at the end of the junior and senior years. On the completion of the course diplomas are given to those who have passed satisfactory examinations.

On May 22d commencement exercises of the school were held at Ward's Island in common with the schools of the Manhattan State Hospitals, East and West.

IMPROVEMENTS, NEW BUILDINGS, ETC.

The principal improvements made during the year are as follows:

SEWAGE DISPOSAL PLANT

A sewage disposal plant, by broad irrigation, was placed in operation at the north colony June 1st, consisting of the collection of sewage into tanks by gravity, then pumping through tile pipes which extend over several acres of property, and by means of hydrants connected with these pipes, 150 feet apart, we govern the distribution over the surface, changing every day in different hydrants so as to prevent pooling by large distribution of large quantities in one place. Some of these hydrants have hose attached so as to better direct the discharge. We get no

odor whatever from this system, as the receiving tanks are pumped out daily. The great object in installing this plant was more particularly to insure purity of the water supply. Since 1889, the date of the establishment of this colony, the sewage has been run into a pond of somewhat less than an acre in extent, from which it is gradually filtered away, the effluent mingling with the ground water, which is here from 15 to 20 feet below the surface. Analyses of the ground water in the vicinity have shown that there was some contamination, but proof that such has never spread to the point where the water supply is taken is afforded by the fact that tests of water from driven wells 30 feet in depth, made a few hundred feet from this pool, have been found free from contamination. But it was felt that this might not be expected to continue, the more especially since the use of water, as well as the contamination, would gradually increase. Again, the taking of the water supply from the ground for the new colony, about 3,000 feet in the opposite direction, might be expected to cause somewhat new conditions. The area over which the sewage is to be distributed is large enough to insure only about one foot in depth of sewage per year over the area. The modern system of nitrification renders it certain that this amount of sewage may be safely placed on the area without any danger to the water supply. This quantity of sewage will be thoroughly nitrified and the effluent will pass down into the ground water as pure as that water itself. Moreover, evaporation will play, especially in these open porous soils, an important part in the sewage disposal.

As to the agricultural benefits, while this has not been made the most important consideration, nevertheless it is believed that a considerably increased production of the farm will follow the systematic application of the sewage. During the season of 1901 this has not been done. Indeed, the sewage has been, a portion of the time, allowed to run to waste on uncleared ground. It is expected, however, to systematically apply it to the cultivated land during another season, after which more definite information as to the agricultural benefits will be available.

The sewage disposal works were carried out under the supervision of Mr. George W. Rafter, of Rochester.

A brick storehouse and cold-storage building, with refrigerating apparatus and ice-making plant, is now completed.

SOUTH COLONY

Work on the new colony, which was commenced in January of 1899, has been completed as follows:

Group 4.—This group is completed practically, with the exception of covering the steam pipes and permanently securing the cables for electric lighting in the basement.

The dining-room and kitchen building for groups 3 and 4 are in the same state of completion as group 4. A hydraulic elevator from the scullery to kitchen is now being erected. The kitchen furniture is in place and has been tested. Power-house and coal shed completed as regards building. The trestle for coal shed has not been built, but timbers for same are on the ground. The batteries of boilers are in place, covered, tested, and six of them in operation. Engines and dynamos are in place, pumps installed and working, pump rooms completed with the exception of the cement floors and railing around the pit.

Group 3.—This group is nearly completed as regards the building. Finished flooring required in two fire-proof corridors and part of central building. Steam pipes are not covered, nor are the steam stacks enclosed, nor have the cold-air conduits been erected. Wiring for lines completed but not permanently secured in the basement.

Group 2.—This group is nearly completed in the rough. Plastering finished, steel ceiling erected and painted, casings for doors and windows on, doors hung and trimmed, sashes all fitted and trimmed, plumbing nearly completed and the marble in water sections now being erected. Pipes, stacks and radiators all in place, but the pipes are yet to be covered, the stacks enclosed, and the cold-air conduit erected. Wiring for lighting basement is finished. Floors are being laid in the second story of cottage D. All tiling completed and mantels

erected. Dining-room and kitchen building for groups 1 and 2 advanced towards completion same as group 2. In the general bathroom for groups 1 and 2 the marble work is now being erected.

Group 1.—Buildings erected and roofs nearly finished. Plastering commenced in the second story of cottage D and the rough work for the plumbing well advanced. The mantels for this group are now being erected. Conduits for electric wiring above basement are in place. Piping for steam heating in basement also in place and stacks for heating are being erected. The ventilators for roofs and sashes for buildings are now on the premises. Porch work for this group has been commenced. The water-supply system has been installed and connections made to groups 2, 3 and 4, but have not been tested in group 2, nor have connections been made to group 1.

A sewage disposal system, on the same principle as at the old colony, has been installed and is ready for operation for groups 3 and 4. For groups 1 and 2 manholes for this system have been built but no pipes have been laid.

A laundry building was commenced and the walls are up to the first story, but the building is now delayed for the want of iron.

Plans and specifications are prepared for a new bakery and contract will be given out in a few weeks.

IMPROVEMENTS ORDINARY

Improvements ordinary will be found in full detail under the reports of the engineer, carpenter, plumber, painter, etc.

EXTRAORDINARY IMPROVEMENTS AND RECOMMENDATIONS, WITH APPROXIMATE COST, FOR THE ENSUING FISCAL YEAR

Administration building	\$20,000
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This improvement is an indispensable necessity. It will be impossible to conduct the affairs of the hospital in anything like

an efficient and satisfactory manner in our present cramped quarters. Our census is now 1,300, and when the new colony is opened we will take care of 2,500 more, making a total patient population of 3,800. To care for the administrative and clerical work incident upon so large a population, we will have no more room than we had when our census was only 350, unless the building asked for is allowed us.

Extension to stable for accommodation of 30 horses and converting the present stable into a carriage wagon house in connection with the present one, which is very much too small.....	\$7,000
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Owing to our extensive premises and the new grounds that must be cultivated and the long distances to different parts of the hospital, an extension to our present stable will be a necessity. We will require at least 30 horses for the various purposes, and a place must be provided for their accommodation.

Horses, 8.....	\$1,600
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We already feel the necessity for more horses, and 8 will be required for our immediate relief. In various emergencies during the past year we were forced to borrow of our neighbors. This condition should be permitted to obtain no longer.

Cow barn, including silos, milk room, etc., capacity 160 head. (Plans for this have been drawn)....	\$10,000
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This improvement has long been required, and the need grows greater from day to day. Our present barn, accommodating 18 cows, is an old wooden building so far advanced in decay as to be almost beyond effectual repair.

Cows, 160	\$8,000
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To put into execution our scheme of improvement a herd of 160 cows will be required. We believe this will be an investment from which we will get quick and profitable returns.

Cement walks between pavilions and dining-rooms in each group	\$1,000
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Owing to the muddy condition of our soil in the wet weather, our inability to find stone on the premises, and the long distance of our dining-rooms from the wards, cement connecting walks are urgently required. This improvement will pay for itself in a very short time by saving the wear and tear on the buildings caused by sand and mud, which cling to the feet, being tramped into the floors. We can do this work entirely by patients' labor.

Shade trees, shrubbery, etc., for new colony..... \$500

To properly ornament the grounds of the new colony, and to provide shade for the patients, this sum is required to buy trees, shrubbery, etc.

Repairs to wooden corridors of groups A, B and C,
between wards and dining-rooms..... \$1,500

The existing open wooden corridors connecting the different pavilions of groups A, B and C have been for several years a source of real danger to our patients, owing to their dilapidated condition. They are beyond effective repair, and new structures are urgently and imperatively required.

Renewing wooden floors in wards D2, E1, F3, group
C, and in the building now occupied by the female
laundry, old colony \$720

The floors of these buildings have never been relaid, and on account of their worn and splintered condition they are not only unsightly but are a constant source of danger, and to occupy them with any degree of comfort and safety new floors must be put in place.

Ambulance \$400

It is proposed to have only one infirmary ward for the old and new colonies, and to convey the sick, infirm and helpless patients from one group to another would require an appropriate vehicle. The necessity for this is obvious when it is remembered that all the pavilions of the old colony are detached, and in certain instances they are separated one from the other by almost a mile.

ACKNOWLEDGMENTS

For books, magazines, papers and other literature which have added so much to the comfort and pleasure of the patients we are indebted to the Olympic Club and Mr. J. M. Cabellos, of Bay Shore; the Hospital Book and Newspaper Society and Mr. W. J. Johnson, of New York; Rev. and Mrs. R. L. Brydges and Mrs. H. H. Hollister, of Islip; Mrs. G. A. Smith, of Central Islip; Mr. Eben Pierce, of Hophaugh, and Hon. Henry A. Reeves, of Northport.

OFFICERS AND EMPLOYEES

I wish to thank the officers and employees who have so loyally supported me in my efforts to transact the business of the hospital, and for their close attention and watchfulness of details in the various departments of the institution.

THE STATE COMMISSION IN LUNACY

To the gentlemen of the State Commission in Lunacy who have so materially aided us with their good counsel and valuable suggestions on various occasions, and who have given the hospital such close and personal attention, we are deeply grateful.

BOARD OF MANAGERS

In closing our report we desire again to thank your honorable board for the sound advise and firm support so constantly shown us in our humble efforts to conduct the affairs of the hospital along the lines you have so ably mapped out for our guidance.

Yours, very respectfully

G. A. SMITH

Superintendent

TREASURER'S REPORT

General Fund

CENTRAL ISLIP, October 1, 1901

Hon. HENRY E. HOWLAND, *President Board of Managers Manhattan State Hospitals*

Dear Sir.—Herewith please find the treasurer's annual report for Manhattan State Hospital at Central Islip, general fund, for the year ending September 30, 1901.

Receipts:

From State Treasurer for maintenance on estimates 1 to 12 inclusive.....	\$211,165 00
From reimbursing patients.....	384 43
From all other sources.....	669 11
Total receipts for maintenance.....	<u>\$212,218 54</u>

Expenditures:

Deficit October 1, 1900.....	\$2,867 77
Estimate No. 1, for salaries.....	12,044 98
Estimate No. 2, for wages.....	67,640 42
Estimate No. 3, for provisions and stores.....	67,455 14
Estimate No. 4, for ordinary repairs.....	3,449 71
Estimate No. 5, for farm and grounds.....	8,090 72
Estimate No. 6, for clothing.....	12,896 98
Estimate No. 7, for furniture and bedding.....	3,113 53
Estimate No. 8, for books and stationery.....	1,457 43
Estimate No. 9, for fuel and light.....	18,656 71
Estimate No. 10, for medical supplies.....	811 95
Estimate No. 11, for miscellaneous expenses.....	11,837 86
Estimate No. 12, for transportation.....	62 45
Remitted to State Treasurer.....	502 32
Balance on hand September 30, 1901.....	1,330 57
Total expenditures during the year.....	<u>\$212,218 54</u>

Very respectfully

W. H. KIMBALL

Treasurer

TREASURER'S REPORT

Special Fund

CENTRAL ISLIP, October 1, 1901

Hon. HENRY E. HOWLAND, *President Board of Managers Manhattan State Hospitals*

Dear Sir.—Herewith please find the treasurer's annual report for Manhattan State Hospital at Central Islip, special fund, for the year ending September 30, 1901.

Receipts:

Total receipts from State Commission in Lunacy for extraordinary improvements.....	\$460,754 76
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Expenditures:

Total disbursements during year for extraor- dinary improvements under apportionments by State Commission in Lunacy.....	\$460,754 76
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Very respectfully,

W. H. KIMBALL

Treasurer

STATISTICAL TABLES

SPECIAL TABLE No. 1

Medical Service, October 1, 1900, to September 1, 1901

Number of physicians.....	5
Ratio of physicians to patients.....	1 to 257.8
Annual per capita cost of medical service.....	\$6.655

SPECIAL TABLE No. 2

Employees October 1, 1900, to September 1, 1901

Total number of employees.....	213
Ratio of employees to patients.....	1 to 6.05
Ratio of attendants to patients.....	1 to 11.3
Per capita cost of all employees.....	\$52.473

SPECIAL TABLE No. 3

Recoveries, October 1, 1900, to September 30, 1901

Percentages.....	None
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SPECIAL TABLE No. 4

Deaths, October 1, 1900, to September 30, 1901

Percentage:	
On average daily population.....	3.103
On whole number treated.....	2.965
On number discharged.....	400

SPECIAL TABLE No. 5

Article	Total quantity	Total cost
Flour, barrels.....	1,874	\$6,263 96
Meat, fresh, pounds.....	220,134	15,639 10
Poultry, pounds.....	3,284	366 36
Sugar, pounds.....	68,597	3,674 48
Coffee, pounds	17,233	2,039 78
Tea, pounds	4,305	1,039 22
Butter, pounds.....	44,586	9,399 33
Eggs, dozens.....	17,940	3,019 63
Cheese, pounds	11,498	1,154 92
Milk, condensed, quarts.....	62,252	7,813 26
Liquors, distilled, gallons.....	10	17 20
Coal	6,255	12,706 49

SPECIAL TABLE No. 6

Article	Average price	Per capita cost
Flour, per barrel.....	\$3.342	\$4.859
Meat, fresh, per pound.....	.0706	12.055
Poultry, per pound.....	.1112	.284
Sugar, per pound.....	.0535	2.85
Coffee, per pound.....	.1183	1.582
Tea, per pound.....	.2414	.806
Butter, per pound.....	.2108	7.292
Eggs, per dozen.....	.1683	2.342
Cheese, per pound.....	.1004	.896
Milk, condensed, per quart.....	.1255	6.061
Liquors, distilled, per gallon.....	1.72	.0133

SPECIAL TABLE No. 7

Fuel and light, October 1, 1900, to September 30, 1901

Coal, total annual cost.....	\$12,706.49
Annual per capita.....	9.857
Number of tons consumed.....	6,255
Average price	\$2.04

INFORMATION AND EXTRACTS FROM REGULATIONS

SCHEDULE OF TRAINS

Leave Long Island City for Central Islip, 8.40 a. m., 11.10 a. m.; Sundays, 9.14 a. m.

Leave Central Islip, 2.14 p. m., 4.03 p. m.; Sundays, 5.56 p. m. Hospital long-distance telephone, 19 Islip; telegraph, Central Islip, Long Island.

Railroad tickets at reduced rates can be obtained at the hospital or at the city office, No. 1 Madison avenue.

REGULATIONS

The superintendent shall regulate and determine the times at which patients may be visited by their friends, and no visitor shall be allowed to see a patient without his consent.

Friends of patients will be allowed to see them when their condition admits of it, but each patient may only be visited once in two weeks, unless special permission is given by the superintendent, on account of the patient's illness, or for other sufficient reason.

Visitors are expressly forbidden to furnish money, wine, liquor or tobacco to any inmate of the hospital, or to deliver to, or receive from, a patient any letter, parcel or package without the knowledge and permission of the superintendent.

No attendant shall receive any perquisite or present from any patient, or friend of a patient, or sell to, or buy anything from a patient.

The physicians attached to the hospital will attend in the office at the usual visiting hours, and will cheerfully and fully answer all questions addressed to them as to the condition and prospects of the different patients. Friends of patients are requested to apply to the physicians for information, and not the attendants, who are not qualified to judge of such matters.

Letters of inquiry should be addressed to the superintendent, and will be promptly answered.

Friends of patients should give notice of any change of residence in order that they may be notified without delay in the event of the patient's death.

Visits from other than relatives of patients will only be permitted when satisfactory evidence is presented that such visits have the sanction of the patient's nearest relative.

Visits from committees of lodges or benevolent societies, made with a view of testing a patient's sanity, will on no account be permitted. The superintendent will certify as to the patient's condition whenever such certification is needed.

Visitors of all kinds must first apply at the office of the superintendent, and are forbidden to enter the wards or other parts of the hospital buildings in any other way.

Visiting days are Tuesdays, Thursdays, Sundays and holidays.

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900.....	855	388	1,243
Admitted during the year ending Sept. 30, 1901:			
On original commitments:			
From residences.....			
By transfers from county houses.....			
By transfers from other institutions for insane.	81	25	106
Total number under treatment during year.	936	413	1,349
Daily average population.....	897	392	1,289
Capacity of institution.....	755	281	1,036
Discharged during the year:			
As recovered.....	1	.....	1
As improved.....	7	4	11
As unimproved.....	2	.....	2
As not insane.....			
Died.....	30	10	40
Whole number discharged during the year.....	40	14	54
Remaining October 1, 1901.	896	399	1,295

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening.....	May 1889
Total acreage of grounds and buildings.....	1,000
Value of real estate, including buildings.....	\$1,659,260 72
Value of personal property.....	110,563 35
Acreage under cultivation.....	285

Receipts during year, maintenance fund:

From State Treasurer for maintenance on estimates	
1 to 12 inclusive	\$211,165 00
From reimbursing patients.	384 43
From all other sources	669 11

Total receipts for maintenance.....	\$212,218 54
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Total receipts from State Commission in Lunacy for extraordinary improvements.....	\$460,754 76
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Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries	\$12,044 98
Estimate No. 2. For wages	67,640 42
Estimate No. 3. For provisions and stores.....	67,455 14
Estimate No. 4. For ordinary repairs.....	3,449 71
Estimate No. 5. For farm and grounds.....	8,090 72
Estimate No. 6. For clothing	12,896 98
Estimate No. 7. For furniture and bedding	3,113 53
Estimate No. 8. For books and stationery	1,457 43
Estimate No. 9. For fuel and light.....	18,656 71
Estimate No. 10. For medical supplies	811 95
Estimate No. 11. For miscellaneous expenses....	11,837 86
Estimate No. 12. For transportation.....	62 45

Total disbursements, estimates 1 to 12 in- clusive.....	\$207,517 88
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Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy	\$460,754 76
Remitted to State Treasurer, sundry receipts, Chap. 580. Laws 1899.....	502 32
General maintenance fund.....	1,330 57
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Weekly per capita cost on daily average number of patients, estimates 1 to 12 inclusive.....	\$3 08
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Maximum rate of wages paid attendants :	
Men.....	\$420 00
Women....	360 00
Minimum rate of wages paid attendants :	
Men.....	240 00
Women.....	168 00
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Proportion of day attendants to average daily population	114 to 1,289
Proportion of night attendants to average daily population.....	22 to 1,289
Percentage of daily patient population engaged in some kind of useful occupation .....	.88
Estimated value of farm and garden products during year.....	\$9,755 45
Estimated value of articles made or manufactured by patients during year	18,438 61
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TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION		
	Men	Women	Total	Men	Women	Total
Moral:						
Adverse conditions (such as loss of friends, busi- ness troubles, etc)...	1	.....	1	.....	.....	.....
Physical:						
Intemperance	2	5	7	.....	.....	.....
Epilepsy	2	.....	2	.....	.....	.....
Old age.....	.....	1	1	.....	.....	.....
All other bodily dis- orders and ill health..	.....	1	1	.....	.....	.....
Heredity	1	.....	1	1	1	2
Congenital defect.....	.....	1	1	.....	.....	.....
Unascertained.....	77	17	92	80	.....	80
Total	81	25	106	81	1	82

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute.....	.....	1	.....	.....	1	1
Mania, chronic.....	5	.....	.....	5	.....	15
Melancholia, acute.....	.....	.....	.....	1	.....	.....
Melancholia, chronic.....	13	.....	4	13	.....	72
Paranoia.....	3	.....	.....	3	.....	1
General paralysis.....	7	.....	5	7	.....	11
Dementia, primary.....	1	.....	.....	1	1	20
Dementia, terminal.....	76	.....	31	77	.....	157
Imbecility with maniacal attacks.....	1	.....	.....	2	.....	.....
Total.....	106	1	40	109	2	277

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901					SINCE OCTOBER 1, 1888				
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT	
	Men	Women	Total	Men	Women	Men	Women	Total	Men	Women
Nine months to one year			1	1				1	1	
Two to three years	1		1			1		1		
Five to ten years									1	
Unascertained						1		1		
Total	1		1	1		2		2	2	

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases :						
Influenza	2	.....	2	2	.....	2
Erysipelas .....	.....	.....	.....	2	.....	2
Dysentery .....	.....	.....	.....	3	1	4
Tuberculosis	5	2	7	58	21	79
Constitutional diseases :						
Diabetes mellitus and diabetes insipidus	1	.....	1	2	.....	2
Diseases of the digestive system :						
Mouth, salivary glands, pharynx, tonsils and œsophagus .....	.....	.....	.....	1	.....	1
Diseases of the intestines	1	.....	1	10	1	11
Diseases of the liver .....	.....	.....	.....	5	1	6
Diseases of the peritoneum .....	.....	.....	.....	.....	4	4
Diseases of the respiratory system :						
Diseases of the lungs .....	.....	.....	.....	17	2	19
Diseases of the circulatory system :						
Diseases of the pericardium .....	.....	.....	.....	.....	1	1
Diseases of the heart	6	3	9	40	11	51
Aneurism .....	.....	.....	.....	.....	1	1
Diseases of the blood and ductless glands :						
Hodgkin's disease, Addison's dis- ease and myxœdema .....	.....	.....	.....	.....	1	1
Diseases of the genito-urinary system	4	3	7	18	5	23
Diseases of the nervous system :						
Diseases of the spinal cord .....	.....	.....	.....	.....	1	1
Diseases of the meninges .....	.....	.....	.....	.....	1	1
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions) .....	.....	1	1	23	6	29
Epilepsy	1	.....	1	1	1	2
Mental diseases :						
Exhaustion of acute mental dis- ease	1	.....	1	1	.....	1
Exhaustion of chronic mental dis- ease						
General paralysis of the insane ..						
	5	.....	5	12	.....	12

Table No. 7—(Concluded)

CAUSES OF DEATH	YEAR ENDING SEP- TEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
The intoxications; heat stroke; obesity:						
Heat stroke.....				2		2
Debility of old age.....	2		2	4		4
Accident.....				3		3
Surgical and gynecological diseases and diseases of the skin.....				2	1	3
Malignant new growths or cancer....	2	1	3	8	4	12
Total	30	10	40	216	61	277

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during
the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	1	.....	1	1	.....	1
Collateral branches.....	1	1	2	1	1	2
No hereditary tendency..	6	15	21	8	15	23
Unascertained.....	73	9	82	74	9	83
Total.....	81	25	106	84	25	109

TABLE No. 9

Showing civil condition of patients admitted during the current year
and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single.....	52	14	66	55	14	69
Married.....	19	2	21	19	2	21
Widowed.....	8	8	16	8	8	16
Unascertained.....	2	1	3	2	1	3
Total.....	81	25	106	84	25	109

TABLE No. 10

Showing degree of education of patients admitted during the current
year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Academic.....	1	2	3	1	2	3
Common school.....	6	3	9	8	3	11
Read and write.....	8	4	12	8	4	12
No education.....	.....	3	3	.....	3	3
Unascertained.....	66	13	79	67	13	80
Total.....	81	25	106	84	25	109

TABLE No. 11

Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	Year Ending September 30, 1901						Since October 1, 1888			
	Duration Previous to Admission			Period Under Treatment			Duration Previous to Admission		Period Under Treatment	
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Total
Under one month.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....
One to three months.	3	.....	3	.....	.....	.....	.....	.....	.....	.....
Three to six months.....	1	1	2	.....	.....	.....	.....	.....	.....	.....
Six to nine months.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....
Nine months to one year ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
One year to eighteen months	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eighteen months to two years	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Two to three years.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Three to four years.....	.....	.....	.....	6	.....	6	.....	.....	.....	.....
Four to six years.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Six to ten years.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ten to twenty years.....	1	.....	1	7	5	12	.....	.....	.....	.....
Twenty years and over .....	.....	.....	.....	8	.....	8	.....	.....	.....	.....
Unascertained	24	5	29	.....	.....	.....	.....	.....	.....	.....
Total.....	30	10	40	30	10	40	221	56	277	277
Average duration of insane life (giving years and tenths)				11.2	10.9	11.05			12.7	10.6

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 15 to 20 years.....	3	.....	3	3	.....	3
From 20 to 25 years.....	11	3	14	12	3	15
From 25 to 30 years.....	13	4	17	13	4	17
From 30 to 35 years.....	8	3	11	10	3	13
From 35 to 40 years.....	17	5	22	17	5	22
From 40 to 50 years.....	12	5	17	12	5	17
From 50 to 60 years.....	12	4	16	12	4	16
From 60 to 70 years.....	3	.....	3	3	.....	3
From 70 to 80 years.....	2	1	3	2	1	3
Total	81	25	106	84	25	109

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 20 to 30 years.....	1	.....	1	1	.....	1
From 40 to 50 years.....	.....	.....	.....	1	.....	1
Total	1	.....	1	2	.....	2

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 20 to 25 years.....				1	.....	1
From 25 to 30 years.....				7	4	11
From 30 to 35 years.....	3	2	5	17	8	25
From 35 to 40 years.....	5	.....	5	35	5	40
From 40 to 50 years.....	8	3	11	55	18	73
From 50 to 60 years.....	5	3	8	53	15	68
From 60 to 70 years.....	8	2	10	38	6	44
From 70 to 80 years.....	1	.....	1	10	.....	10
From 80 to 90 years.....	.....	.....	.....	2	.....	2
Unascertained.....	.....	.....	.....	3	.....	3
Total	30	10	40	221	56	277

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month.....	6	5	11
One to three months.....	1	3	4
Three to six months.....	2	.....	2
Six to nine months.....	2	.....	2
Nine months to one year.....	3	3	6
Eighteen months to two years.....	4	.....	4
Two to three years.....	1	1	2
Four to five years.....	2	.....	2
Five to ten years.....	1	.....	1
Twenty to thirty years.....	1	.....	1
Unascertained.....	58	13	71
Total.....	81	25	106

TABLE No. 16

Showing period of residence in asylum of patients remaining under
treatment September 30, 1901

PERIOD OF INSANITY	Men	Women	Total
Three to six months.....	.....	1	1
Six to nine months.....	2	1	3
Nine months to one year.....	1	.....	1
One year to eighteen months.....	8	2	10
Eighteen months to two years.....	12	4	16
Two to three years.....	30	11	41
Three to four years.....	18	14	32
Four to five years.....	30	12	42
Five to ten years.....	210	167	377
Ten to fifteen years.....	253	94	347
Fifteen to twenty years.....	175	48	223
Twenty to thirty years.....	157	39	196
Thirty years and upwards.....	.....	6	6
Total.....	896	399	1,295

TABLE No. 17

Showing the occupation of those admitted during the current year
and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, law- yers, architects, artists, authors, civil engineers, surveyors, etc.....	3	.....	3	3	.....	3
Commercial:						
Bankers, merchants, ac- countants, clerks, sales- men, shopkeepers, shop- men, stenographers, typewriters, etc.....	7	.....	7	7	.....	7
Agricultural and pas- toral:						
Farmers, gardeners, herds- men, etc.....	3	.....	3	4	.....	4
Mechanics, at out- door vocations:						
Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc....	21	.....	21	21	.....	21
Mechanics, etc., at sed- entary vocations:						
Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc....	2	.....	2	2	.....	2
Domestic service:						
Waiters, cooks, servants, etc.....	9	11	20	9	11	20
Educational and high- er domestic duties:						
Governesses, teachers, stu- dents, housekeepers, nurses, etc.....	.....	5	5	.....	5	5
Commercial:						
Shopkeepers, saleswomen, stenographers, type- writers, etc.....	.....	3	3	.....	3	3

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Employed in seden- tary occupation:						
Tailoresses, seamstresses, bookbinders, factory workers, etc.....	3	2	5	3	2	5
Laborers	17	.....	17	18	.....	18
No occupation	5	4	9	6	4	10
Unascertained	11	.....	11	11	.....	11
Total	81	25	106	84	25	109

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
United States.....	26	5	31	27	5	32
Ireland.....	20	9	29	21	9	30
England.....	1	1	2	2	1	3
Germany.....	10	4	14	10	4	14
Russia.....	4	2	6	4	2	6
Canada.....	2	.....	2	2	.....	2
Scotland.....	1	1	2	1	1	2
Austria.....	5	1	6	5	1	6
Italy.....	2	.....	2	2	.....	2
France.....	1	.....	1	1	.....	1
Sweden.....	2	.....	2	2	.....	2
Switzerland.....	.....	2	2	.....	2	2
Unascertained.....	7	.....	7	7	.....	7
Total.....	81	25	106	84	25	109

Of the total number admitted since the 1st of October, 1888, the parents of 74.4 per cent were both of foreign birth.

In 2.76 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In 1.83 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Men	Women	Total
Albany.....			
Allegany.....			
Broome.....			
Cattaraugus.....			
Cayuga.....			
Chautauqua.....			
Chemung.....			
Chenango.....			
Clinton.....			
Columbia.....			
Cortland.....			
Delaware.....			
Dutchess.....			
Erie.....			
Essex.....			
Franklin.....			
Fulton.....			
Genesee.....			
Greene.....			
Hamilton.....			
Herkimer.....			
Jefferson.....			
Kings.....			
Lewis.....			
Livingston.....			
Madison.....			
Monroe.....			
Montgomery.....			
Nassau.....			
New York.....	106		106
Niagara.....			
Oneida.....			
Onondaga.....			
Ontario.....			
Orange.....			
Orleans.....			
Oswego.....			
Otsego.....			
Putnam.....			
Queens.....			
Rensselaer.....			
Richmond.....			
Rockland.....			
St Lawrence.....			

Table No. 19—(Concluded)

COUNTIES	Men	Women	Total
Saratoga			
Schenectady			
Schoharie			
Schuyler			
Seneca			
Steuben			
Suffolk			
Sullivan			
Tioga			
Tompkins			
Ulster			
Warren			
Washington			
Wayne			
Westchester			
Wyoming			
Yates			
Soldiers' Home			
Total	106		106

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	Men	Women	Total
Albany.....			
Allegany.....			
Broome.....			
Cattaraugus.....			
Cayuga.....			
Chautauqua.....			
Chemung.....			
Chenango.....			
Clinton.....			
Columbia.....			
Cortland.....			
Delaware.....			
Dutchess.....			
Erie.....			
Essex.....			
Franklin.....			
Fulton.....			
Genesee.....			
Greene.....			
Hamilton.....			
Herkimer.....			
Jefferson.....			
Kings.....			
Lewis.....			
Livingston.....			
Madison.....			
Monroe.....			
Montgomery.....			
New York.....	270	121	391
Niagara.....			
Oneida.....			
Onondaga.....			
Ontario.....			
Orange.....			
Orleans.....			
Oswego.....			
Otsego.....			
Putnam.....			
Queens.....			
Rensselaer.....			
Richmond.....			

Table No. 20—(Concluded)

COUNTIES.	Men	Women	Total
Rockland			
St Lawrence			
Saratoga			
Schenectady			
Schoharie			
Schuyler			
Seneca			
Steuben			
Suffolk			
Sullivan			
Tioga			
Tompkins			
Ulster			
Warren			
Washington			
Wayne			
Westchester			
Wyoming			
Yates			
Unascertained	626	278	904
Total	896	399	1,295

LABOR REPORT FROM OCTOBER 1, 1900, TO SEPTEMBER 30, 1901

ENGINEER'S DEPARTMENT—NEW STEAM WORK

Twenty-seven 3-inch wells (new colony) driven on an average of 40 feet deep, 7 2-inch wells driven on an average of 18 feet deep and connected to steam pumps, 4 steam boilers fitted up with new blow-off pipes and valves, 5 sets tea and coffee urns fitted up with new pipe and valves, 7 radiators connected new in D 1, 3 new drip pipes and steam trap to electric light engines, making and fitting up 3 coil radiators, 1 hot-water heater reconnected in boiler house, 2 days' work on new plungers and pistons in sewage pump, 4 radiators connected in steward's apartments, 1 new exhaust pipe fitted to steam pump 32 feet long, with valve $2\frac{1}{2}$ inches.

Repairs.—Eight hundred fifty-nine valves, 17 reducing valves, 63 steam traps, 78 steam pipes of all sizes, from 8 inches to $\frac{1}{4}$ inch; 21 steam electric light engines, 6 steam laundry engines, 64 steam boiler feed pumps, 11 damper regulators, 2,546 feet section covering for various sizes of steam pipe, from 10 inches to $\frac{3}{4}$ -inch; 24 radiators, 102 air valves, 11 laundry machines, 18 hot-water boilers, 3 water columns, 61 water gauge glasses fitted, 2 steam separators, 12 steam boilers cleaned out at various times, 10 lubricators, 9 boiler blow-off cocks, 4 boiler blow-off pipes, 9 sets grate bars, 32 machine belts, 18 manhole gaskets, 24 handhole gaskets.

NEW ELECTRICAL WORK

One switchboard connected to 17 telephone stations and junction box, 10,587 feet telephone wire connected, church and entertainment hall rewired and 110 lamps connected, also new switchboard made for 6 circuits and connected; rewiring extensions to C, E, and F dining-room, 30 new lights and fixtures fitted up for various wards, and outside lights with the required moulding and iron armored conduit.

Repairs.—Fifty-six telephones, 15 telephone switchboards, 29 telephone wires, 106 telephone batteries recharged; 4 telephone conduits, 9 telephone and electric light wires grounded, 3 electric light switchboards, 21 electric light wires, 83 electric light brackets, 64 electric light fixtures, 162 electric light sockets, 3 electric light switches, 70 electric light fuses, 6 electric light cables, 9 electric light transformers, 50 dynamo brushes, 40 fire-alarm bells and call bells, 9 electric light poles erected.

Miscellaneous.—Average daily consumption of water from October 1, 1900, to September 30, 1901, 150,990 gallons. Average daily discharge of sewage water 95,642 gallons.

PLUMBER'S REPORT

New work.—Fifty-four hand basins fitted up in groups A, B and C; 9 stop sinks fitted up in groups A, B and C; 5 new gate boxes fitted on gates in group D, 1 new $\frac{3}{4}$ -inch hot-water supply pipe fitted up in ward 3, group C; 1 new 2-inch galvanized iron waste-pipe fitted in attendants' home for stop-sink in steward's kitchen, 1 water-closet fitted up in group D pantry, 1 new 80-gallon hot-water boiler fitted up in ward 2, group A; 15 3-inch wells driven in colony, 1 80-gallon hot-water boiler fitted up in ward 2, group C; 1 new hot-water boiler fitted up in Dr. Smith's kitchen, 1 sink fitted up in group C pantry, 2 sinks fitted up in group E pantry, 2 sinks fitted up in group F pantry, 1 8-inch sewer main laid at motor house, 9 urinals fitted up in group D, E and F; 1 water-closet fitted up in ward 1, group D; 1 bath tub fitted up in ward 3, group A; 1 new bath shower fitted up in administration building, 1 new bath shower fitted up in Dr. Smith's house, 4 new floats fitted in cistern of urinals in attendant's home, 23 new faucets fitted in groups, 4 new waste hand basins fitted in ward 5, group D; 4 stop-cocks fitted in groups A, B and C; 18 new $\frac{3}{4}$ -inch hose bibbs fitted on sprinklers of terraces for Dr. Smith.

Repair work.—Twenty-one hot-water boilers, 452 faucets, 22 stop-cocks, 12 bath valves, 45 bath tubs, 8 shower baths, 27 stop-sinks, 64 water-closets, 43 wash hand basins, 6 burst pipes, 19

urinals, 41 cisterns, 19 ball cocks, 6 leaders, 8 roofs, 21 sewers cleared, 49 water-closets cleared, 20 wash hand basins cleared, 8 urinals cleared, 12 running traps cleared, 9 floor drains, 11 ranges cleaned and repaired, 12 bath tubs cleared, 21 sewers cleared, 70 fire hydrants tested, 6 lead joints calked in ward 2, group F; 1 back air pipe altered in ward 6, group D; 6 tea and coffee urns repaired, 4 hot and cold water supply fitted up in E and F pantry, 3 incubators repaired, 1 paris green cart pump repaired, 1 road sprinkler cart repaired, 6 pumps repaired, 1 pump fitted up, 2 waste-pipes of box cleared, 2 cess-pools of sewer cleared out in attendants' motor house.

TINSMITH'S REPORT

New work.—Made 14 dishpans, 27 5-inch stovepipes, 25 milk pans, 1 10-gallon boiler, 20 15-gallon boilers, 2 bread boxes, 1 8-quart dipper, 34 2-quart dippers, 2 2-quart oil cans, 1 revolving galvanized iron stovepipe cap, 1 sheet iron hood made for blacksmith's shop, 3 ice boxes retinned, 29 tin cups, 36 dustpans, 2 galvanized iron steam blowers, 2 lamp wells for farmer, 12 14-quart cans, 2 pudding pans, 1 galvanized iron tray for tea urns in group A, 3 stage reflectors, 9 wire stakes, 1 new galvanized iron strainer.

Repairs.—One hundred and thirty-nine cans, 26 boilers, 41 dippers, 86 pails, 246 baker's pans, 34 dishpans, 28 teapots, 51 pitchers, 9 saucepans, 18 wash hand basins, 4 ice boxes, 8 ice coolers, 16 sprinkler cans, 6 ladles, 9 kettles, 9 pudding pans, 11 dust pans, 7 lanterns, 5 ash cans, 5 copper ridges of roof, 2 carriage lamps, 7 roofs of the various pavilions.

PAINTER'S REPORT

Painted interior of ward 2, group D, 2 coats and stenciled; interior of ward 1, group D, 3 coats and stenciled; interior of administration building, varnished woodwork, 2 coats; painted interior of wards 1, 2 and 3, group A, 1 coat; interior of dining-room of group F, 2 coats and stenciled; interior of dining-room of group C, 2 coats; interior of butcher's shop, 2 coats; interior

of old dining-room of group D, and the base of the new, 2 coats; interior base of wards 1, 2 and 3, group E, 1 coat; interior base of wards 1, 2 and 3, group E, 1 coat; interior base of wards 2 and 3, group D, 1 coat; interior of dining-room of group B, 2 coats; exterior of the superintendent's house, sheds and fences; exterior of administration building, fences and sheds; exterior of upper and lower greenhouses, exterior of storehouse, 1 coat; exterior of cold-storage house, 1 coat; exterior of plumbing shop, 1 coat; exterior of stable and coachhouse, 1 coat; exterior of new wagon shed, 2 coats; exterior of new blacksmith's shop, 2 coats; exterior of carpenter's shop, 1 coat; exterior of oil house, 1 coat; exterior of lumber shed, 1 coat; exterior of cow barn, 1 coat; exterior of motor house, 1 coat; exterior of corn crib, 1 coat; exterior of new and old hog pen, 1 coat; exterior of chicken houses, 1 coat, and roof, 2 coats; exterior of paint shop, 1 coat; exterior and interior of the new band stand, 2 coats; interior of wards 1, 2 and 3, group B, in part; exterior of morgue, 2 coats; 600 settees, 2 coats; 650 turned posts, 1 coat; exterior of pantry of group E, 1 coat; exterior of pantry of group F, 1 coat; exterior of attendants' home, 1 coat; exterior of ward 1, group F, 1 coat; exterior of ward 2, group F, 1 coat; 100 telephone poles, 1 coat; 350 fence posts, 150 tubs, 1 coat; 23 water pumps, 1 coat; painted and varnished 600 chairs, oiled 15 floors, 2 coats; bronzed all the new pipes in wash rooms of groups A, B and C; stained and varnished 50 washstands, bronzed and varnished 35 picture frames, painted 25 water barrels, 1 coat; painted and lettered 175 small signs, painted 375 window sashes, 1 coat; 350 pair of window shutters, scraped off and varnished 25 closets, scraped off and varnished 150 window screens, scraped off and varnished 20 screen doors, painted and varnished 1 depot wagon, painted 25 ladders, 1 coat; painted 300 radiators, 1 coat; enameled 12 bath tubs, 4 coats; stained and varnished 200 tables in dining-rooms, painted and numbered 12 coal cars, painted brick foundations in dynamo room, painted fronts of 12 boilers and pumping apparatus, calcimined 1 room in attendants' home, bronzed pipes, etc.; varnished woodwork in kitchen, 1 coat; painted 52 rooms

in ward 2, group F; painted, striped and varnished 1 carriage and 4 carriage wheels; waxed floors, etc., at superintendent's house; 2,000 feet of fence boards, 1 coat; stained 20 coffins, made shoe polish, put in 500 lights of glass, sizes from $8\frac{1}{2}$ to 38 by 42, in greenhouses, wards, etc.

CARPENTER'S REPORT

Built 13 pig pens 104 feet long and 25 feet wide, took down old partition in group C dining-room and put up a new one 32 feet long, and tore up the old floor and laid new in the dining-room 22 by 20 feet; put up closet in same room and altered the shelves, 150 wheelbarrows put together, built blacksmith's shop, size 21 by 30 feet, and fitted it up with benches and closets; put new shelves in both sides of greenhouse, 9 feet wide by 105 feet long; put 750 square feet of flooring in D 2, took out partition doors of 4 patient's rooms in D 1, and stage erected 23 by 27 feet with 5 stairs leading to stage; made closet for electric switch for stage 3 by 7 feet and put beam in gable 12 by 12 by 18 feet, and other work necessary to the completion of the job; made 20 bread boards for bakery, 2 by 8 by 3 feet; put up 1 peep-o'-day chicken house 10 by 60 feet, built wagon shed 85 feet by 21 feet, built 2 chicken houses, size 20 by 20 feet each; made 6 brooders 4 by 4 feet, 2 dozen floor polishers, 3 poles for wagons, 3 lattice closets for mops and brooms in group D, 24 head boards for graves, 34 coffins, 6 spatulas for kitchen, 15 whiffletrees, 2 moulds for mason for cement steps, 3 dozen rims for water-closets, 2 china and delph closets, 11 feet wide and 8 feet high; 2 stepladders and 10 repaired, 16 screens for windows, 4 boxes for pumps 4 by 4 by 8 feet, 3 towel racks made and put up, 5 commode chairs, 1 band stand built, size 24 by 24, octagon shape; awnings put up and taken down on superintendent's house and administration building; storm sash and doors put up and taken down on superintendent's house, screen doors and windows put up and taken down again on superintendent's house and administration building.

Repaired.—One cylinder for washing machine, 2 wringers, 235 wheelbarrows, 3 hand carts, 5 hose carts, 14 common ladders,

1 express wagon, 90 chairs, 56 settees, 10 bread cutters, 1 wagon, 1 tool closet made for shop, 38 tables, 16 tables cut down, moved the old blacksmith's shop about 150 feet and fitted it up with shelves for painter's use, floored it and put in sill; put new sill in shed in superintendent's house, and made new doors for the cellar of the shed and put them on; made rack for bicycles in cellar of attendants' home, and 2 for front office; made 4 window sashes, put panels in 8 doors, put sash cord in 65 windows, repaired and put up 200 window shades, repaired 35 locks and 25 doors, repaired a lot of wire fencing, repaired verandas of A, B and C, and also many floors in the various wards.

BAKERY REPORT

Bread and Cakes Made

White bread, in pounds.....	491,059
Graham bread, in pounds.....	20,000
Rye bread, in pounds.....	26,000
Ginger cake, in pounds.....	3,400
Johnny cake, in pounds.....	3,500
Pound cake, in pounds.....	2,200
Currant biscuits, in pounds.....	2,500
Cinnamon bread, in pounds.....	1,800
Apple pie, in pounds.....	2,600
Mince pie, in pounds.....	400

MAT AND BROOM SHOP REPORT

Articles Made

Mattresses, hair.....	1,503
Pillows, hair.....	1,452
Broom, floor.....	1,384
Broom, hair.....	83
Broom, whisk.....	74
Brushes, scrub.....	348
Brushes, dust.....	225
Brushes, shoe.....	193
Brushes, stove.....	12

Brushes, bath.....	16
Brushes, window.....	94
Door mats, double.....	97
Door mats, single.....	281
Cuspidor mats.....	32
Total.....	5,794

SHOE SHOP REPORT

Articles Made

Boots, men's, pairs.....	436
Shoes, men's, pairs.....	187
Shoes, women's, pairs.....	128
Slippers, pairs.....	155
	906

Articles Repaired

Boots, men's.....	2,020
Shoes, men's.....	933
Shoes, women's.....	581
Harness, repaired.....	45
	3,534

LAUNDRY REPORT

Number of Pieces Laundered

Aprons	35,999
Aprons, scrub.....	3,468
Aprons, waitresses'.....	2,422
Aprons, cooks'.....	1,099
Aprons, strap.....	2,880
Blankets	3,905
Bedticks	1,365
Blue overalls.....	590
Blue jumpers.....	350
Burlaps, meat.....	590

Chemises, muslin.....	21,199
Chemises, knit.....	11,257
Chemises, canton.....	7,431
Caps, cooks'	479
Caps, woolen.....	15,713
Collars	11,481
Cuffs, pairs.....	4,559
Corset covers.....	1,590
Coats, men's.....	5,339
Clothes, bags.....	4
Drawers, woolen.....	40,994
Drawers, knit.....	10,475
Drawers, muslin.....	7,563
Dresses	16,583
Drawers, flannel	1,336
Drawers, canton.....	7,607
Handkerchiefs	5,615
Jackets, cooks'.....	456
Jackets, white.....	6,956
Jackets, pea	290
Night dresses.....	20,331
Napkins	1,169
Overcoats, men's.....	360
Pillowcases	145,255
Pillowshams	1,002
Pillowticks	156
Petticoats	626
Pants, men's.....	17,244
Pajamas	225
Shirts, men's.....	79,314
Shirts, under.....	40,760
Shirts, night.....	561
Shirts, flannel.....	224
Sheets	139,162
Spreads	1,358
Socks, pairs	64,104

Skirts, under.....	12,536
Skirts	982
Stockings, pairs.....	19,850
Towels	543,691
Towels, bath.....	55,358
Towels, roller	1,319
Towels, dish	6,886
Tablecloths	10,647
Table napkins	16,682
Ties	10,897
Trousers	442
Vests, men's.....	5,189
Vests, under.....	671
Window curtains, pairs.....	683
Waists	50
Wrappers	81
Total.....	1,427,410

TAILOR SHOP REPORT

Articles Manufactured

Caps	1,524
Mittens, pairs	1,008
Coats	729
Trousers, pairs	1,408
Vests	757
Overcoats	55
Drill jackets	84
Drill trousers, pairs.....	100
Overalls, pairs	138
Overall jackets	91
Buggy covers	5
Baseball bags	3
Saddle blankets	2
Drop curtains	2
Total.....	5,916

Articles Repaired

Suits, men's	550
Overcoats.	400

FARM PRODUCE

Statement showing the kinds and quantities of farm produce, including fruits, vegetables, etc., raised and consumed during the year ending September 30, 1901, with the estimated value of each:

Name and quantity	Estimated value
Asparagus, 1,994 bunches.....	\$279 16
Beets, 222 bushels	95 46
Beans, Lima, 53 bushels.....	43 99
Beans, string, 253 bushels.....	184 69
Cabbage, 24,327 heads.....	729 81
Carrots, 164 bushels.....	50 68
Cauliflower, 232 heads	9 28
Celery, 89 dozen.....	22 25
Corn, sweet, 1,705 dozen.....	221 65
Cucumbers, 6 barrels	8 70
Corn, broom, 740 pounds.....	44 40
Citron, 23	1 15
Egg plant, 533.....	47 97
Flour, rye, 10 barrels.....	32 50
Kale, 1 bushel.....	35
Leeks, 720 bushels.....	540 00
Lettuce, 44 bushels	44 00
Melons, water, 1,805	144 40
Melons, musk, 825.....	58 00
Okra, 3 bushels	2 25
Onions, 370 bushels.....	185 00
Oyster plant, 8 bushels.....	12 00
Parsnips, 237 bushels.....	142 20
Parsley, 11 bushels.....	13 75
Peas, 95 bushels.....	128 25
Peppers, 23 bushels.....	57 50

Potatoes, 2,385 bushels.....	\$1,669 50
Potatoes, sweet, 111 bushels.....	119 80
Pumpkins, 532	21 28
Radishes, 8,534 quarts	128 01
Rhubarb, 5,208 bunches	208 24
Spinach, 33 barrels	29 70
Squash, 1,032	51 60
Tomatoes, 391 bushels	261 97
Tomatoes, strawberry, 42 bushels.....	52 50
Turnips, 1,181 bushels.....	413 35
Straw, rye, 17 tons.....	204 00
<hr/>	
Total vegetables	\$6,259 34

Fruits and Berries

Apples, 78 barrels.....	\$124 80
Currants, 86 quarts.....	31 44
Gooseberries, 40 quarts.....	4 00
Grapes, 352 pounds.....	10 56
Peaches, 42 bushels.....	42 00
Pears, 39 bushels.....	33 15
Raspberries, 116 quarts.....	5 80
Strawberries, 2,143 quarts.....	128 58
<hr/>	
	380 33

Meats and Sundries

Beef, 1,557 pounds.....	\$108 99
Chicken, 153 pounds.....	18 36
Eggs, 1,850 dozen.....	351 50
Lamb, 173 pounds	22 49
Milk, 25,916 quarts	1,036 64
Mutton, 107 pounds.....	7 49
Pork, 22,433 pounds	1,570 31
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	3,115 78
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Total.....	\$9,755 45
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EIGHTH ANNUAL REPORT
OF THE
MANAGERS
OF THE
Gowanda State Homeopathic Hospital
AT GOWANDA, N. Y.
TO THE
State Commission in Lunacy
FOR THE YEAR ENDING SEPTEMBER 30, 1901

EIGHTH ANNUAL REPORT OF THE GOWANDA STATE
HOMEOPATHIC HOSPITAL

To the State Commission in Lunacy

Gentlemen—I have the honor to transmit to you the eighth annual report of the Gowanda State Homeopathic Hospital.

EUGENE H. PORTER

President

FORMER MANAGERS

WILLIAM TOD HELMUTH, M. D. H. M. PAINE, M. D.
ASA STONE COUCH, M. D. S. LOUIS SOULE, Esq.
EDWIN H. WOLCOTT, M. D.

PRESENT BOARD OF MANAGERS

FRANK D. ORMES, M. D. EUGENE H. PORTER, M. D.
GEORGE W. SEYMOUR, M. D. O. P. LETCHWORTH, Esq.
NORRIS MOREY, Esq. ERWIN C. FISHER, Esq.
FRED J. BLACKMON, Esq.

OFFICERS OF THE BOARD

EUGENE H. PORTER.....President
FRANK D. ORMES.....Vice-President
FRED J. BLACKMON.....Secretary and Treasurer

OFFICERS OF THE HOSPITAL

DANIEL H. ARTHUR, A. M., M. D.....Superintendent
GEORGE F. ADAMS, M. D.....First Assistant Physician
CLARENCE A. POTTER, M. D.....Junior Physician
EARL R. QUACKENBUSH.....Steward
OLIVE A. CARPENTER.....Matron
CHARLES W. TERRY.....Counsel

REPORT OF MANAGERS

To the State Commission in Lunacy, Albany, N. Y.

Gentlemen—The board of managers of the Gowanda State Homeopathic Hospital make the following report for the fiscal year ending September 30, 1901, being its eighth annual report, together with the reports of the superintendent and treasurer for the same period.

STANDING COMMITTEES

Under the by-laws adopted by the board there are two standing committees, viz.: an executive committee and a visiting committee.

The following are the present members thereof:

Executive committee—Erwin C. Fisher, O. P. Letchworth and Dr. George W. Seymour.

Visiting committee—Dr. Frank D. Ormes and Fred J. Blackmon.

CONDITION OF THE HOSPITAL

The buildings generally continue in good repair. Some of the farm buildings are in need of further repairs and more paint. The water tower and tank have been painted since our last report. The cottage has also been completed since our last report and now accommodates twelve patients. It is an ideal home for convalescent and undisturbed patients, and the board most earnestly recommends to your consideration the building of other cottages of a similar character. There has also been constructed during the year an icehouse of sufficient capacity for the demands of the hospital for some years to come. There is also under construction a root cellar.

NEW BUILDINGS

Heeding the recommendations made by this board in its last annual report, your honorable Commission has provided for the construction of two three-story wings, which will more than double the capacity of the hospital and relieve the overcrowded condition of the hospital at this time. Contracts have recently been awarded for the construction of these new buildings, and ground has already been broken for their construction. Provisions have also been made for the construction of a coach barn and plans are being prepared therefor.

SANITARY CONDITIONS

The farm buildings continue without sewer connections. The main sewer, which runs east from the administration building 500 or 600 feet and thence westerly at right angles to the Cataaugus creek, became obstructed between the administration building and the right angle above mentioned during August of this year and sewage could not be conducted through it, all of which has been specially heretofore reported to you. A new sewer has been constructed along the line of the hypotenuse of the triangle formed as above described and is now in working order. An investigation is now being made as to the cause of the obstruction and as to who, if any one, is responsible for it. In all other respects the sanitary condition of the hospital is perfect.

WORKING FORCE OF THE HOSPITAL—OFFICERS

There has been no change in officers on the medical staff since our last report. Each continues as heretofore attentive to his duties and with the interest of the hospital at heart.

ATTENDANTS AND NURSES

The same tenure has existed with attendants and nurses, and the board can only again repeat its last observations relative to length of service of this class of employees, and it can only regret the evil without suggesting a remedy.

NATURAL GAS

The gas wells continue without loss in pressure or volume. The board repeats its recommendations of a year ago relative to the use of the gas engine for power for the reasons then stated, and especially urges consideration thereof on the part of your honorable Commission before purchasing additional boilers, which may become necessary on account of the new wings now under construction.

WATER

The water question has been solved since the board's last report. An air pressure system has been installed, which carries the water from the springs to the power-house, and it is then pumped into the tank on the water tower in the ordinary way. The supply is abundant and the cost remarkably low.

PRECAUTIONS AGAINST FIRE

The basement and garrets were intended for and have been necessarily used largely for storage purposes, and there is generally in storage more or less of inflammable or extra hazardous materials.

For want of a place elsewhere the carpenter shop and paint shop are situated in the basement. In view of the fact that so much property and so many lives are placed in jeopardy whenever a fire occurs in any of the buildings, and that the hospital is not within the protection of any organized fire department, this board recommends that a separate building should be constructed, removed at a proper distance from the other buildings, in which to hold and store all extra hazardous or inflammable material, and in which, with proper division of space, such workshops as increase the risk of fire should be placed. At a comparatively small expense this would remove a constant menace to the hospital buildings and their inmates.

ADDITIONAL FIRE PROTECTION

We would further recommend that at such early day as the Commission may deem best, the modern automatic sprinkler system should be introduced into the buildings. This, it is understood, largely reduces the expenses of insurance, and it is supposed is the best permanent system for protection against fire in the absence of the protection which is afforded by the organized fire departments of the large cities. In the long run it is believed that such protection against fire would not only be in the interest of humanity, but would also be economical to the State.

VISITATIONS

During the year your honorable Commission has visited the hospital, as well as many other prominent officials and citizens, including his Excellency Governor Odell. The board has held its quarterly meetings at the hospital and has met there and elsewhere as requirements demanded.

All of which is respectfully submitted.

EUGENE H. PORTER

FRANK D. ORMES

OGDEN P. LETCHWORTH

GEO. W. SEYMOUR

NORRIS MOREY

ERWIN C. FISHER

FRED J. BLACKMON

REPORT OF TREASURER

To the Board of Managers of the Gowanda State Homeopathic Hospital

The treasurer of the hospital respectfully submits the following summary of his receipts and disbursements for the year ending September 30, 1901:

FOR DRAINAGE AND DRAINAGE MATERIAL

(Chapter 736, Laws 1895)

Amount on hand at last report.....	\$150 11
Amount now on hand.....	150 11

SPECIAL FUND

Receipts

Received from Comptroller's drafts.....	\$17,132 52
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Disbursements

Paid vouchers drawn by superintendent and steward.	\$17,132 52
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MANUFACTURING FUND

Receipts

Amount on hand from last report.....	\$798 03
Received from general fund vouchers.....	789 31

Total.....	\$1,587 34
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Disbursements

Transferred to general fund.....	\$1,587 34
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GENERAL FUND

Receipts

Amount on hand from last report.....	\$33 39
Amount transferred from Manufacturing fund.....	1,587 34
Received from Comptroller as follows:	
Salaries	10,999 00
Wages	23,225 00
Supplies	43,250 00
Received from reimbursing patients.....	2,199 22
Received from private patients.....	852 65
Received from steward's return	449 32
Received from C. W. Terry, attorney, for costs, etc...	62 50
Received from Sing Sing prison, refunded freight....	16 54
Total.....	<u><u>\$82,674 96</u></u>

Disbursements

Officers' salaries.....	\$10,968 70
Wages	23,085 79
Provisions and stores.....	18,363 15
Ordinary repairs.....	2,271 15
Farm and grounds.....	3,579 53
Clothing	3,165 45
Furniture and bedding.....	1,678 45
Books and stationery.....	765 69
Fuel and lights.....	8,094 43
Medical supplies	522 30
Miscellaneous supplies.....	4,590 50
Transportation of patients.....	1,139 39
Total.....	<u><u>\$78,224 53</u></u>
Balance on hand.....	<u><u>\$1,210 44</u></u>

Respectfully

FRED J. BLACKMON

Treasurer

REPORT OF MEDICAL SUPERINTENDENT

To the Board of Managers

Gentlemen—In accordance with statute I submit the following report of the operations of this hospital for the fiscal year ending September 30, 1901:

The number of patients remaining in the hospital October 1, 1900, was 153 men, 158 women; total, 311. There were admitted during the year, on original commitments, 44 men, 41 women; total, 85; by transfer from other institutions for the insane, 11 men, 11 women; total, 22. The total number of patients under treatment during the year was 208 men and 210 women; total, 418. The average daily population we find to have been 167.69 men, 174.03 women; total, 341.72.

The total number discharged during the year was 67. Of these, 17 were discharged as recovered, 11 improved and 9 unimproved; 1 was not insane, and 29 died.

There remained in the house October 1, 1901, 351 patients. Our capacity is 260 patients. This gives us at the present time 91 more patients to care for than the capacity of the institution.

Thirty-four per cent. of admissions were of foreign birth.

Fifty-two per cent. of the patients admitted during the year had been insane for more than two years; 70 per cent. of the cases that we discharged as recovered were under treatment for less than one year; 88 per cent. were insane less than one year prior to admission.

More than 44 per cent. of those who died here during the year were over 60 years of age.

Over 70 per cent. of the patients admitted during the year are those which can be classed as terminal cases, and considerably more than this will develop as such when we have had them under observation long enough to make a positive diagnosis.

During the past year, when our staff force would permit, and whenever a commitment paper has been received with a statement that the patient was more than 60 years of age, it has been my endeavor to send a member of the staff to make exami-

nation in order to determine whether this patient could not be as well cared for at home, or by the county authorities at the county house, with the same benefit to the patient as would be to admit him to our already overcrowded hospital. We have been enabled in this way to have many simple senile cases taken care of at home or at the county house—cases who are not insane within the meaning of the statute. Such cases, should they be admitted at all times to the State hospitals, would make the burden of taxation for the care of the insane much larger than it is at present. It has been our endeavor to educate the examining physicians of the district of this hospital as far as possible to appreciate the meaning of the statutes, and the difference between simple senile cases, low grade imbeciles and insanity within the meaning of the statute. In spite, however, of all precautions we have taken we have been compelled to admit here many old, weak cases who have either died shortly after admission or continued to live and occupy space.

One patient who, after admission, it was determined was not insane died here for the reason that his condition was so critical (suffering from valvular disease of the heart) that he could not be removed.

The admission of an unusually large number of this class of patients has swelled our death rate much beyond that of last year.

OCCUPATION OF PATIENTS

We have not changed our opinion as to the efficacy of occupying patients in recreation and work as much as their condition, mental and physical, will warrant. The progress of grading and the work of farming has been much advanced here on account of this labor.

I have been able to notice a good effect in the majority of cases, and at no time have there been any deleterious results from overwork or from doing work at all. Many patients are strongly resistive to any recreation or any employment. Such patients, it is often noticed, improve in no respect until induced

to exercise of some kind, the effect of which for the better the patient is often able to detect for himself, and it arouses in him ambition and in most cases an improved condition follows.

AMUSEMENTS

We have continued during the fall, winter and spring to have bi-monthly dances, which have given much pleasure to those patients who care for this form of amusement and appreciate its exercise and good fellowship.

As we have no orchestra among the employees of the hospital, these bi-monthly dances take up considerable of the three cent per capita weekly allowance for amusement, and leave us but little for other forms of entertainment.

With the increase in number of patients to 700, which we look for on the completion of the two new wings now being constructed, there will of course be considerable added for amusements, which we are much in need of.

During the summer many paroled patients have traveled back and forth from town and have attended the ball games and other amusements to be found in the village and in the vicinity. With better walks and roads, which we have been laboring at as time would allow, the means of exercise will be increased, especially during the winter months, much to the satisfaction of all, both employees and patients.

It is our intention the coming season to prepare a recreation ground on the large field directly in front of the administration building, where our employees and patients may practice baseball and other games, and where we will establish regular field day sports.

Through the kindness of the State Commission in Lunacy, who allowed the money for same, we have been enabled to send many of our patients to the Pan-American Exposition at Buffalo, all of whom have enjoyed it very much and have expressed their gratitude for the privilege and the confidence reposed in them.

Last Fourth of July a picnic was given by the hospital for the benefit of patients and employees and their families at Helmuth

grove. A platform was erected, an orchestra furnished and dancing was the leading amusement of the day. We were also able to employ a band that furnished music between dances and serenaded the hospital buildings during the evening. Refreshments were served in abundance, and all seemed to feel that there had been a merry celebration.

During the winter amateur troops from the village, also a few monologists from elsewhere, have entertained our patients. On account of lack of means we are unable to supply the best performers and must of necessity rely upon cheaper talent. It shall be our aim, however, in the future to increase amusements and recreations each year as our population increases.

Several acres of underbrush in the grove about the cottage has been thoroughly cleared away and easy settees placed therein, which affords a pleasant place in the afternoon for our women patients, Helmuth grove, on the east side of the buildings, being exclusively used for men patients. It shall be our endeavor the coming spring to clear up several more acres in the vicinity of the cottage and gradually make of this grove a park, with pleasant drives and walks.

The work of clearing up such places is slow on account of the fact that all must be done by our present employees, with the assistance of patient labor. We are, however, anxious to provide in the near future places of amusement, recreation and rest, as are found at other institutions, believing that patients at this hospital should be as well cared for in this respect as at the other State hospitals throughout the State.

On account, however, of being a small institution, having few patients and a large farm of 500 acres to cultivate, we have been unable to progress as rapidly as we otherwise would, having used our labor principally for what we considered was most useful and should be first attended to, viz.: the farming and the grading about the hospital.

We are therefore of the opinion that some funds should be allowed this institution for landscape gardening, walks, drives and the clearing up of the groves.

TRAINING SCHOOL

Since the organization of the hospital there have been eleven graduates from our training school. There were eight members of the class of 1901, all of whom passed the official examination and received a State diploma. There are at present four members of the senior class and seven juniors.

The staff were assisted in their work of instructing the class last year by a lecture by Dr. F. Park Lewis, of Buffalo, on "The Eye," and one by Dr. Emily Swett, of Medina, on "Gynecological Nursing." This assistance will be increased the present year by Dr. John W. Le Seur, of Batavia, who will deliver a lecture on "Hospital Etiquette," and Dr. John D. Zwetsch, of Gowanda, on "Surgical Nursing."

It shall be our endeavor to continue the standard as begun, and give to all attendants who attend the classes a thorough training in the care and nursing of the insane, as well as general medical and surgical nursing.

With a small staff and nearly all untrained nurses when we became operative, the work of the assistant physicians and supervisors was continuous and trying. Of the eleven nurses who received diplomas, nine continue to be employed at the hospital. With nine trained nurses and eleven others under course of training the work is much easier and a great load is lifted from the shoulders of the officers.

MEDICAL SERVICE

There has been no increase in the medical service at this institution. Dr. Adams, first assistant, and Dr. Potter, junior assistant, continue to manifest the same interest and fidelity to the work as formerly. Dr. E. Ray Buhrman, who during the past winter and part of the spring acted as woman physician, became ill and has since been in the Adirondack mountains for her health. While here her work was thoroughly satisfactory, and we trust that her health will sufficiently improve so that in the near future she may be able to resume her position. Mr. William Frank Fowler, a senior medical student in the New York Homeo-

pathic College, has acted in the capacity of druggist and interne during the past summer, returning for his senior course at New York on October 1st. This leaves me with two assistants.

With two assistants constantly in the house this would seem a sufficient number for the population, but with one assistant on vacation or called away on business and the other confined to bed on account of sickness, it is liable to give to the hospital at times a small service.

The assistant physician at this hospital is also required to do the work in the pharmacy, which is considerable and takes up much of his time that should be employed on the wards or at study. It shall be our endeavor during the coming fiscal year to acquire a regular interne, whose duty it shall be to relieve and assist the assistant physicians.

With the increase in patients that we expect within a year a woman physician must be regularly employed, as provided for by statute.

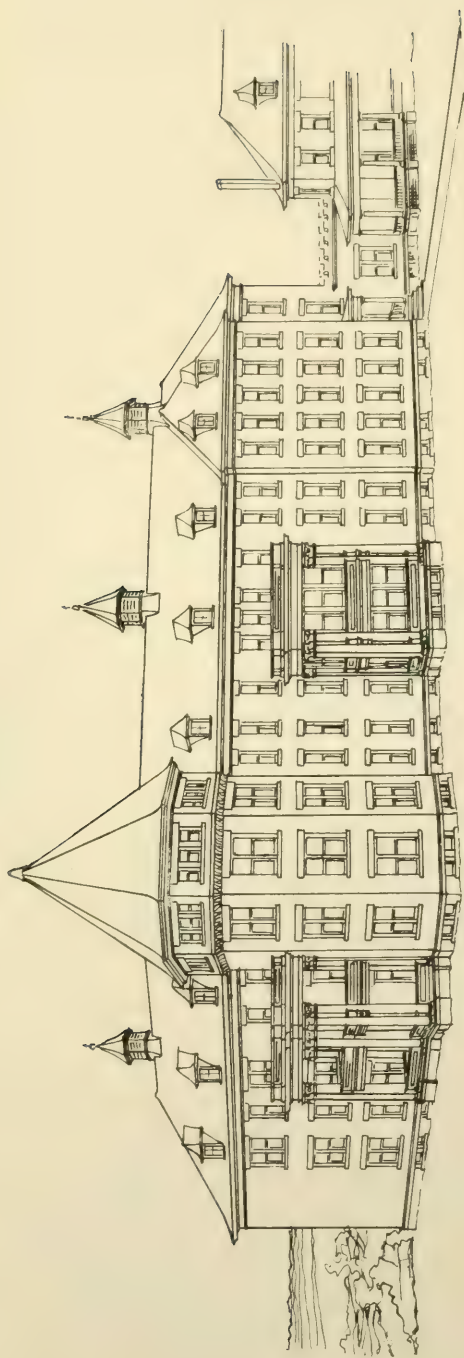
The steward, Earl R. Quackenbush, and matron, Miss Olive Carpenter, have ably aided in their respective work and have given efficient service.

IMPROVEMENTS

During the past year the Commission in Lunacy have allowed about \$200,000 for the construction of a male and female wing. These new structures, at the suggestion of Governor Odell, are to be three stories in height, and will increase the capacity of the institution from 260 to 710, the new wings accommodating 450 patients.

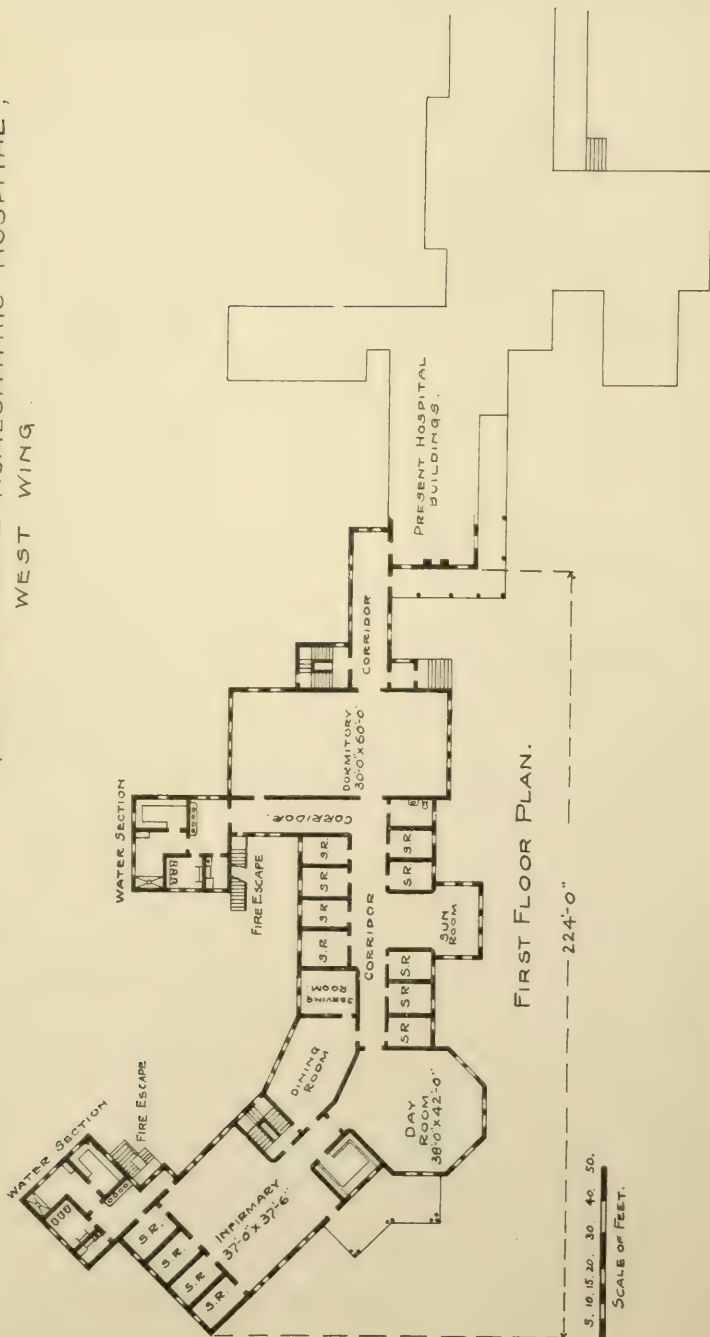
These wings were carefully planned, and the plans have been submitted to your board and approved by the State Commission in Lunacy and the State Architect.

On the completion of these buildings, with the increased number of patients, this institution will be the better able to take its place among other institutions in comparison. It is expected these buildings will be ready for occupation October 1, 1902.



GOWANDA STATE HOMEOPATHIC HOSPITAL . WEST WING.
GOWANDA, N. Y.

GOWANDA STATE HOMEOPATHIC HOSPITAL, WEST WING.



With the increased number of patients the increase in employees, with but few exceptions, will be nurses and attendants.

Our yearly per capita, with an increase in the daily average population of 25.3 patients over last year, has been reduced \$1.39, although there was an increase of \$5,349.36 in the total expenditures for maintenance. There would have been a still greater reduction in the per capita cost and a smaller increase of expenditures but for the following reasons:

During the year previous there was maintained a "clothing manufacturing department," and at the beginning of the fiscal year—October 1, 1900—this department was discontinued. It became necessary for the hospital to purchase the entire stock of this department, amounting to \$789.31, and to also expend \$784.21 for labor of seamstress and tailor during the year, who had previously been paid by this "manufacturing department."

During the past year the hospital has paid an average price of \$2.04 per ton for coal, as against an average price of \$1.71 for the year previous. The average price of staple articles has been higher also during the past year, which has increased the expense considerably.

Besides the new buildings, there have been many other improvements about the institution, some of which are of great value.

A new switch has been placed, running from the Erie main line to the rear of the boiler house, at a cost of \$4,603.65. This has eliminated the work of hauling coal a quarter of a mile, which was not only a damage to the roads in winter, but was of considerable expense, as it required a man and team during the summer months and two teams during most of the winter months. It is also a great convenience from the fact that all fully loaded cars can be brought almost to the hospital doors.

A silo, at a cost of less than \$300, has been placed adjoining the cow barn. This silo has a capacity of 125 tons and provides ensilage for thirty cows for six months.

All the barns, stables and outbuildings have been painted red,

which adds much to the general appearance, especially at this hospital, as these buildings were old and much worn and had never been painted.

A root cellar 60 feet by 19 feet has been erected at a cost of \$500. This building we were much in want of, as last year it became necessary for us to use our vegetables up very rapidly as they would not keep buried in the ground. The present cellar is sufficiently large and will enable us to take proper care of our roots.

An ice house, in which we can store 1,500 tons of ice, was completed the past year at a cost of \$1,650. This has been a marked saving to the State. Last winter we were able to harvest this ice at a rate of thirty cents a ton, and we have sufficient left to last through the year. On account of lack of storage last year it became necessary during the late fall and winter to buy ice at a high price.

A slaughter-house is undergoing completion in the vicinity of the piggery, eliminating the necessity of doing our killing in the open. This slaughter-house has been erected sufficiently large with the idea contemplated of in the near future raising all our own cattle and doing our own slaughtering. We believe that we can eventually undertake this, not only with a view to saving money for the State, but believing that in this way we will be able to acquire more satisfactory meat.

The water-works at this institution, which were completed during the early part of the fiscal year, have given satisfaction in every respect. By gathering together all the water in sight at the foot of the hill on the Collins road, and siphoning the wells at that time in use into a large tank, we are able to acquire for the use of the hospital about 80,000 gallons of water daily. This quantity of water will be sufficient for the hospital with double its present population. I would also state that in this vicinity there is much more water in sight; in fact, it has been estimated at as much more as we at present have. So when more water is needed it can be easily acquired at small expense.

With the present water-works—an air compressor and Snow

pump at the power-house, operated by the regular night and day fireman—we are able to furnish water to the institution at a rate averaging less than \$1 a day the year around, the water being of good quality as well as sufficient in quantity.

In this connection I would like to state in regard to fire protection that the steel tank in the rear of the institution, 100 feet from the ground, with a capacity of 100,000 gallons, gives a pressure at the power-house of 63 pounds. With this splendid pressure we are able to carry water over the roof of any building at the hospital. This tank is kept constantly full of water, so that in case of emergency we have sufficient water to care for any ordinary fire.

During the past year we have also drilled a new gas well on the Bagdad farm, the result being a well similar in capacity to the one we had previous. We also opened up the well known as No. 1, drilling 400 feet deeper and developing a more permanent quality of gas. Both wells are now at a depth of about 1,500 feet; both have a pressure of 125 pounds to the square inch, and a capacity of about 100,000 cubic feet daily. These wells have not shown any disposition whatever to exhaust. We alternate one with the other, each being used a month at a time. They furnish fuel for the general kitchen, administration kitchen, bakery and laundry, and we feel confident that we have sufficient gas, without jeopardizing the wells, to furnish power for a 25 horse-power gas engine for the laundry.

If the Commission, who are at present favorably impressed with this idea of gas power for the laundry, will allow the amount our wells will effect a saving of over \$3,000 annually to the State for fuel.

NEEDS

We have to reiterate this year the need of the hospital for a propagating house in order to facilitate gardening.

In this locality the spring is late, and where it is necessary to plant our garden from seed, with the liability of early frost in the fall, there is often much loss incurred to the State. As an

example, last year we were able to can over 1,100 gallons of tomatoes; this year, on account of early frosts destroying the tomatoes, we canned less than 300. Had we a propagating house where we could raise these plants during the winter to a large size, as also other plants, the house would surely pay for itself in a few seasons.

Likewise in the matter of flowers. Our flower beds this year, planted from seed, had not developed before they were destroyed by the early fall frosts. Had we good plants to set out as soon as the weather became favorable, our grounds would be decorated all summer with beds of flowers in bloom.

The Commission in Lunacy, two years past, in their reports of this hospital, recommended \$1,000 for this purpose. We have not yet, however, been able to acquire this money.

We are also in need of a new tile floor in the present general kitchen. At the time of construction a cement floor was laid in this kitchen. A cement floor will absorb grease, which it is impossible to remove. In consequence it gives to the floor of a kitchen a stained, dark and unkempt appearance, where it should have the appearance of absolute cleanliness. Such a floor as would be practical can be placed in the kitchen for about \$400.

We will also be in need, with the advent of new buildings and additional patients, of a new boiler in the power-house, some new laundry machinery and an increase of kitchen furniture.

I would recommend that at least forty large trees be transplanted in the vicinity of the hospital buildings. We should also have an appropriation allowed to assist in the completion of grading about the institution, in the complete clearing of the grove west of the buildings and the construction of drives and walks throughout this grove.

With twice the number of patients we will also be in need of increased barn facilities. It will be necessary to double our dairy, and we should have in connection therewith increased ensilage capacity.

The hospital is much in need of a new pigpen. This is a condition that is recognized by the Commission in Lunacy, who,

I think, will readily allow a reasonable amount for the erection of same.

A new dam should also be built the coming year north of the present icehouse in order that we may be able to fill the icehouse with one harvest rather than three or four, as is sometimes necessary on account of the small area of our present pond. There are seasons in this vicinity when the ice is sufficiently thick to cut for a very few days only, and a large pond would prevent a loss to the State on account of the necessity of having to purchase ice.

Owing to the fact that the barns and working section of the farm are far distant from the buildings, and that much time is consumed by teamsters and farm laborers in going to and from their meals, I would recommend that the present farmhouse be fitted up as a dormitory for farmers and that the head farmer be allowed compensation, say at the rate of \$2.50 a week, for boarding them. This, I feel assured, would at the end of the year be a benefit to the State, not only as regards more time for work for the farmers, but from the fact that the room now occupied by these employees will be needed for attendants as the number of patients increases.

We should have, on the completion of the new buildings, furniture to place in them at once in order that there may be no delay.

We will also be in need of increased fire apparatus.

For the purpose of removing the paint and carpenter shops from the basement, as recommended by the board, a sum of money should be allowed for the erection of new shops. This is a very necessary move, as these shops in the basement of the annex and so near the buildings occupied by patients are a constant menace; and if no other money is forthcoming for the hospital the coming year, this is a condition that should be provided for.

We would also state that during the coming year the hospital should be allowed more money for building up its line fences.

I herewith tabulate in order the needs of the hospital for the next year, with the amount of appropriation necessary:

Propagating house.....	\$1,000 00
Paint and carpenter shops.....	1,000 00
Fire apparatus.....	200 00
Boiler.....	2,000 00
Laundry machinery.....	1,200 00
Trees.....	600 00
Grading.....	1,000 00
Refitting farmhouse.....	1,000 00
Barns.....	2,000 00
Silos.....	200 00
Piggery.....	1,500 00
Dam.....	1,000 00
Fence wire.....	200 00
Kitchen floor.....	400 00
Kitchen furniture.....	400 00

VISITATIONS

Besides the visit of Governor Odell and party, as mentioned in your report to the Commission, the hospital was inspected during the past year by Senators Davis and Hill, of Buffalo, and Assemblyman Elijah Cook, of Hamburg. Also by Mr. William R. Stewart, president of the State Board of Charities.

SERVICES

Religious services have been conducted at the hospital during the past year by Rt. Rev. Charles A. Bragdon, archdeacon of the Episcopal Church; Father P. J. Enright, of the Catholic Church; Rev. J. Emory Fisher and Rev. A. J. Purdy, of the Presbyterian Church, and Rev. J. P. Countryman and Rev. S. W. Purvis, of the Methodist Episcopal Church. These ministers conducted services in turn on different Sundays. I desire to express my thanks to these reverend men for their faithful work and the interesting discourses, which have been greatly appreciated by our patients.

ACKNOWLEDGMENTS

I desire to express my thanks to all the members of the board of managers for their hearty co-operation in the management of the hospital. Also to the State Commission in Lunacy for the many courtesies received during the past year.

I wish to express my thanks for papers and magazines sent to the hospital by Mr. F. E. Bard, of Gowanda, and by the Woman's Christian Temperance Union, of Collins Center.

The following list of papers have been received and distributed to the patients on the wards:

Gowanda Leader, Erie County Press, Buffalo News, Buffalo Times, Franklinville Chronicle, Cattaraugus Republican and Jamestown Journal.

Respectfully submitted.

DANIEL H. ARTHUR

Superintendent

REPORT OF STEWARD

TO DANIEL H. ARTHUR, M. D., *Medical Superintendent*

I hereby respectfully submit the following report of departments under my supervision for the fiscal year ending September 30, 1901.

E. R. QUACKENBUSH

Steward

FARM AND GARDEN

The personnel of this department changed considerable during the year, due chiefly to the distance from barns to meals and living apartments at buildings. I would suggest that some arrangements be made at farmhouse for the accommodation of all farm help.

The quantity of manure available has been wholly inadequate to the number of acres cultivated, at least one-half of this acreage having had no fertilizer since the hospital was opened. However, the crops were very good, taking this fact into consideration. Several acres of stump lot was cleared in addition to the other work.

PRODUCTS USED AND SOLD

Milk, 78,536 quarts.....	\$2,954 18
Beef, 3,971 pounds.....	315 58
Pork, 7,669 pounds.....	546 21
Chicken, 318 pounds.....	31 65
Duck, 28 pounds.....	2 80
Eggs, 229 dozen.....	31 52
Apples, 182 $\frac{1}{4}$ bushels.....	79 54
Gooseberries, 41 quarts.....	4 92
Cherries, 69 quarts.....	7 90
Currants, 241 quarts.....	29 41
Raspberries, 203 quarts.....	16 17
Potatoes, 368 $\frac{1}{4}$ bushels.....	155 78
Tomatoes, 59 $\frac{3}{4}$ bushels.....	64 91

Turnips, 100 bushels.....	\$35 33
Onions, 77 $\frac{3}{4}$ bushels.....	54 90
Carrots, 129 $\frac{3}{4}$ bushels.....	38 94
Parsnips, 87 bushels.....	49 40
Beets, 169 $\frac{1}{2}$ bushels.....	52 40
Salsify, 18 $\frac{1}{2}$ bushels.....	13 88
Peas, 70 $\frac{1}{2}$ bushels.....	50 05
String beans, 23 $\frac{3}{4}$ bushels.....	24 82
Spinach, 14 bushels.....	4 50
Beet greens, 24 $\frac{1}{2}$ bushels.....	5 83
Small cucumbers, 34 bushels.....	25 20
Large cucumbers, 1,601 dozen.....	73 42
Corn, 1,528 $\frac{1}{2}$ dozen.....	152 81
Peppers, 30 dozen.....	3 60
Cauliflower, 157 heads.....	7 54
Cabbage, 3,073 heads.....	125 78
Celery, 1,622 heads.....	45 99
Lettuce, 14,887 heads.....	273 28
Parsley, 343 $\frac{1}{2}$ bunches.....	6 45
Radishes, 10,619 bunches.....	127 63
Asparagus, 81 bunches.....	11 04
Rhubarb, 40 bunches.....	1 90
Green onions, 1,790 bunches.....	41 26
Young beets, 382 bunches.....	11 46
Squash, 12 bunches.....	36
Corn meal, 1,260 pounds.....	14 34
Ice, 1,500 tons.....	1,500 00
Gas, 5,110 M feet.....	638 75
Hay, 21 tons.....	126 00
Cow hides, 12.....	36 78
Pig, 1.....	4 84
Horse keep, 5 months.....	40 00

\$7,839 05

EXPENDITURES

Amount for wages, per treasurer's report.....	\$2,382 31
Amount for supplies, per treasurer's report.....	3,579 53
Amount of balance.....	1,877 21
	<hr/>
	\$7,839 05
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INVENTORY OF LIVE STOCK, ETC.

13 horses (carriage, 4; farm, 6; general use, 3).....	\$1,450 00
25 cows, new milch.....	1,125 00
15 Cows, dry.....	450 00
6 heifers	120 00
13 heifer calves.....	156 00
2 bull calves.....	30 00
2 stag calves	24 00
1 bull	35 00
2 fat hogs.....	28 00
9 breeding sows	135 00
20 shoats	180 00
38 pigs	85 00
1 boar	15 00
100 hens	50 00
15 chickens	20 00
21 ducks	12 00
3 turkeys	2 15
	<hr/> <hr/>

FARM AND GARDEN PRODUCTS

Hay, 125 tons.....	\$1,250 00
Straw, 40 tons.....	200 00
Oats, 1,400 bushels.....	448 00
Sweet corn, 225 shocks.....	112 50
Field corn, 250 shocks.....	50 00
Corn, 900 bushels.....	450 00
Carrots, 125 bushels.....	31 25
Beets, 125 bushels.....	37 50

Turnips, 100 bushels.....	\$30 00
Parsnips, 150 bushels.....	67 50
Salsify, 50 bushels.....	20 00
Parsley, 200 bunches.....	6 00
Cabbage, 100 heads.....	5 00
Tomatoes, 50 bushels.....	50 00
Cauliflower, 75 heads.....	7 50
Peppers, 20 dozen.....	2 00
Cucumbers, 30 dozen.....	9 00
Onions, 100 bushels.....	50 00
Mangels, 700 bushels.....	175 00
Potatoes, 1,100 bushels.....	660 00
Rye, 230 bushels	133 40
Wheat, 450 bushels.....	337 50
Beans, 60 bushels.....	135 00
Pop corn, 13 bushels.....	26 00
Pears, 3 bushels.....	6 00
Lumber, 5,000 feet, at \$14 per M.....	70 00
Manure, 200 loads, at 50 cents.....	100 00
	<hr/>
	\$8,386 30
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LAUNDRY

The value of steam power used during the year is included in this report, making the actual cost as near accurate as possible.

GOODS LAUNDERED

Shirts, bosom, 2,909, at 5 cents.....	\$145 45
Collars, 6,285, at 1 cent.....	62 85
Cuffs, 4,691, at 1 cent.....	46 91
Underwear (skirts, dresses, etc.), 129,445, at 1 cent...	1,294 45
Flat work (sheets, towels, etc.), 259,190, at 35 cents..	907 17
	<hr/>
	\$2,456 83
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EXPENDITURES

Amount of wages, per treasurer's report.....	\$905 17
Amount for supplies, per treasurer's report.....	604 43
Estimated value of power.....	947 23
	<hr/>
	\$2,456 83
	<hr/>

CARPENTER'S DEPARTMENT

ARTICLES MADE

One water tank, 4 feet by 2 feet by 2 feet.....	\$2 00
One ice chute.....	7 62
One maple table, 3 feet by 5 feet.....	4 50
Two batten doors, engine room.....	7 05
Two pine tables, 2 feet 8 inches by 5 feet.....	6 00
Two pine desks.....	14 00
One cobbler's bench.....	3 50
One stage platform.....	14 90
Two coal chutes.....	3 00
Two screen doors.....	3 00
Two ladders	4 65
One stone boat.....	6 00
One gate, ward 4.....	3 00
	<hr/>
	\$79 22
	<hr/>

NEW WORK AND REPAIRS

Building root cellar.....	\$22 50
Building slaughterhouse	51 75
Shingling cow barn.....	92 50
Stairs in cow barn.....	3 50
Corridor at silo.....	15 27
Shelving in attic.....	6 50
Shelving in storeroom.....	14 25
Building wagon shed.....	24 00
Building two regulator houses.....	6 00
Making partition sash, mattress room.....	25 00
Building slat floor, engine rooms.....	22 50
Building clothes rooms, west attic	16 26

Building linen closet, administration building.....	\$19 35
Remaking 10 window sash.....	35 00
Partition, compressor room.....	16 00
Building mangers, cow barn.....	15 00
Building stalls and mangers for horses.....	100 00
General repairs.....	581 05
	<hr/>
	\$1,066 43
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EXPENDITURES

Amount of wages, as per treasurer's report.....	\$553 33
Amount for supplies, as per treasurer's report.....	592 32
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	\$1,145 65
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TAILOR

All the clothes used by male patients, including outing shirts, have been made by the one tailor without assistance, also the protection jackets and sheets for all wards.

ARTICLES MANUFACTURED

31 wool suits, at \$6.75.....	\$198 25
15 denim suits, at \$1.50.....	22 50
51 wool coats, at \$3.25.....	165 75
87 crash coats, at \$1.....	87 00
59 white duck coats, at \$1.25.....	73 75
5 denim coats, at 75 cents.....	3 75
67 wool vests, at \$1.25.....	83 75
145 wool pants, at \$2.....	290 00
30 denim pants, at 75 cents.....	22 50
3 white duck pants, at \$1.....	3 00
58 outing flannel shirts, at 50 cents.....	29 00
25 muslin aprons, large, at 50 cents.....	12 50
18 muslin caps, at 25 cents.....	4 50
29 duck protection jackets, at \$2.50.....	72 50
5 duck protection sheets, at \$5.....	25 00
Repairing clothing	128 32
	<hr/>
	\$1,222 07
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EXPENDITURES

Amount of wages, as per treasurer's report.....	\$471 76
Amount of material, as per treasurer's report.....	750 31
	<hr/>
	\$1,222 07
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REPORT OF MATRON FROM SEPTEMBER 30, 1900, TO
OCTOBER 1, 1901

Sheets	539
Pillowcases	354
Tablecloths	183
Towels	773
Dresses, gingham.....	207
Dresses, serge.....	1
Dresses, skirt, cashmere.....	1
Night dresses.....	74
Night shirts.....	239
White shirts.....	26
Dish towels.....	118
Aprons, white.....	372
Aprons, gingham.....	44
Aprons, duck.....	24
Aprons, men's.....	94
Table napkins.....	24
Tray napkins.....	184
Mitt jackets.....	11
Bureau covers.....	61
Laundry bags.....	48
Laundry squares.....	9
Sash curtains.....	25
Muslin curtains, pairs.....	27
Creton curtain, for door.....	1
Creton curtain, for mantle.....	1
Screen curtains.....	8
Muslin curtain for bakery.....	1

Skirts, canton flannel.....	58
Rubber cake bags.....	6
Jelly bags.....	4
Rugs cut and bound.....	109
Shirt waists.....	8
Curtain straps.....	36
Bandages	60
Bandage for abdomen.....	1
Bath tub curtains, rubber.....	2
Canvas waists.....	4
Burial suits.....	5
Bread cloth.....	1
Barber's apron.....	1
Holders	60
Sofa pillow covers.....	10
Milk strainers.....	46
Coffee strainers.....	7
Foot ties, pairs.....	2
Chair cushion.....	1
Nurses' caps.....	164
Drawers, pairs.....	3
Chemises	3
Handkerchiefs	177
Sand bag.....	1
Under waist.....	1
Articles repaired.....	4,930
Mangle apron, button-holed (1 day).....	1

STATISTICAL TABLES

TABLE No. 1

Showing movement of population for the year ending September 30,
1901

	Men	Women	Total
Remaining October 1, 1900	153	158	311
Admitted during year ending Sept. 30, 1901:			
On original commitments:			
From residences.....	44	41	85
By transfers from other institutions for insane	11	11	22
Total number under treatment during year.	208	210	418
Daily average population.....	167.69	174.03	341.72
Capacity of institution	125	135	260
Discharged during the year:			
As recovered.....	11	6	17
As improved.....	3	8	11
As unimproved.....	5	4	9
As not insane.....	1	.....	1
Died	21	8	29
Whole number discharged during the year.	41	26	67
Remaining October 1, 1901.....	167	184	351

TABLE No. 2

October 1, 1900, to September 30, 1901

Date of opening	Aug. 9, 1898
Total acreage of grounds and buildings	500 acres
Value of real estate, including buildings	\$479,139 71
Value of personal property	43,715 82
Acreage under cultivation	309 acres

Receipts during year, maintenance fund:

Balance on hand October 1, 1900	\$33 39
From State Treasury for maintenance on estimates 1 to 12, inclusive	77,474 00
From private patients	852 65
From reimbursing patients	2,199 22
From all other sources	2,115 70

Total receipts for maintenance	\$82,674 96
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Total receipts from State Commission in Lunacy for extraordinary improvements	\$17,132 52
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Disbursements during year for maintenance:

Estimate No. 1. For officers' salaries	\$10,968 70
Estimate No. 2. For wages	23,085 79
Estimate No. 3. For provisions and stores	18,363 15
Estimate No. 4. For ordinary repairs	2,271 15
Estimate No. 5. For farm and grounds	3,579 53
Estimate No. 6. For clothing	3,165 45
Estimate No. 7. For furniture and bedding	1,678 45
Estimate No. 8. For books and stationery	765 69
Estimate No. 9. For fuel and light	8,094 43
Estimate No. 10. For medical supplies	522 30
Estimate No. 11. For miscellaneous expenses	4,590 50
Estimate No. 12. For transportation	1,139 39

Total disbursements, estimates 1 to 12, inclu- sive	\$78,224 53
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Table No. 2—(Concluded)

Total disbursements during year for extraordinary improvements under apportionments by State Commission in Lunacy.....	\$17,132 52
Remitted to State Treasurer, sundry receipts, Chapter 580, Laws of 1899.....	\$3,239 99
Balance October 1, 1901:	
General maintenance fund.	\$1,210 44
Weekly per capita cost on daily average number of patients, estimates 1 to 12, inclusive.....	4.39
Maximum rate of wages paid attendants:	
Men.....	\$27 00
Women	25 00
Minimum rate of wages paid attendants:	
Men	\$20 00
Women	14 00
Proportion of day attendants to average daily population.....	1 to 12.65
Proportion of night attendants to average daily population.	1 to 68.34
Percentage of daily patient population engaged in some kind of useful occupation.....	.519
Estimated value of farm and garden products during year	\$9,635 00
Estimated value of articles made or manufactured by patients during year.....	406 71

TABLE No. 3

Showing the assigned causes of insanity in cases admitted during the current year

CAUSES	YEAR ENDING SEPTEMBER 30, 1901			INHERITED PREDISPOSITION			Unascertained
	Men	Women	Total	Men	Women	Total	
Moral:							
Adverse conditions (such as loss of friends, business troubles, etc.).....	1	.....	1	1	.....	1	....
Mental strain, worry and overwork (not included in above) ..	3	7	10	2	3	5	....
Love affairs (including seduction)	1	.....	1	.....	.....	.....	.....
Physical:							
Intemperance.....	10	.....	10	4	.....	4	....
Sexual excess.....	1	.....	1	.....	.....	.....	.....
Veneral diseases	1	.....	1	.....	.....	.....	.....
Masturbation.....	5	.....	5	3	.....	3	....
Sunstroke.....	1	.....	1	.....	.....	.....	.....
Accident or injury	1	.....	1	.....	.....	.....	.....
Parturition and puerperium .....	.....	2	2	.....	.....	.....	.....
Change of life .....	.....	1	1	.....	.....	.....	.....
Privation and overwork.	1	4	5	.....	1	1	....
Epilepsy	2	.....	2	.....	.....	.....	.....
Old age.....	3	4	7	.....	.....	.....	.....
Epidemic influenza....	1	.....	1	.....	.....	.....	.....
Abuse of drugs	1	1	2	.....	1	1	....
All other bodily disorders and ill health.	4	7	11	.....	2	2	....
Heredity	7	13	20	7	13	20	....
Congenital defect.....	1	.....	1	.....	.....	.....	.....
Unascertained	9	12	21	.....	.....	.....	21
Not insane	2	1	3	.....	.....	.....	.....
Total.....	55	52	107	17	20	37	21

TABLE No. 4

Showing forms of insanity in those admitted, recovered and died during the year ending September 30, 1901, and since October 1, 1888

FORM	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Admitted	Recovered	Died	Admitted	Recovered	Died
Mania, acute delirious ...	1	.....	1	2	.....	2
Mania, acute.....	15	8	...	51	34	.....
Mania, recurrent .....	.....	.....	1	8	3	1
Mania, chronic	18	.....	5	77	.....	7
Melancholia, acute.....	14	9	1	42	24	1
Melancholia, simple.....	.....	.....	.....	1	.....	.....
Melancholia, chronic.....	1	.....	.....	17	.....	4
Paranoia	5	.....	.....	31	.....	.....
General paralysis.....	3	.....	5	19	.....	10
Dementia, terminal	38	.....	13	248	.....	35
Epilepsy with insanity ..	5	.....	2	24	.....	3
Imbecility with maniacal attacks	2	.....	.....	14	.....	.....
Not insane*	5	.....	1	5	.....	1
Total	107	17	29	539	61	64

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 6

Showing the duration of insanity previous to admission, and the period under treatment of patients discharged recovered during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901						SINCE OCTOBER 1, 1888					
	DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT			DURATION PREVIOUS TO ADMISSION			PERIOD UNDER TREATMENT		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Under one month.....	2	3	5	1	.....	1	7	6	13	2	.....	2
One to three months.....	5	2	7	2	1	3	8	6	14	3	6	9
Three to six months.....	.....	.....	.....	5	1	6	4	1	5	18	6	24
Six to nine months.....	1	.....	1	.....	1	1	2	2	4	4	6	10
Nine months to one year ..	2	.....	2	.....	1	1	2	1	3	4	3	7
One year to eighteen months.	1	.....	1	.....	1	1	4	1	5	1	2	3
Eighteen months to two years.	.....	1	1	2	1	3	2	1	3	4	1	5
Two to three years.....	.....	.....	.....	1	.....	1	3	2	5	1	.....	1
Three to four years.....	.....	.....	.....	.....	.....	.....	5	1	6	.....	.....	.....
Four to five years.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....
Five to ten years.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
Total.....	11	6	17	11	6	17	37	24	61	37	24	61

TABLE No. 7

Showing the causes of death of patients who died during the current year and since October 1, 1888

CAUSES OF DEATH	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Specific infectious diseases:						
Tuberculosis				1	2	3
Diseases of the digestive system:						
Mouth, salivary glands, pharynx, tonsils and œsophagus.....	1		1	1		1
Diseases of the intestines.....				1		1
Diseases of the peritoneum.....	1		1	5	2	7
Diseases of the respiratory system:						
Diseases of the bronchi					1	1
Diseases of the lungs.....	2	1	3	2	1	3
Diseases of the circulatory system:						
Diseases of the heart.....	4	1	5	4	1	5
Diseases of the blood and ductless glands:						
Diseases of the genito-urinary system.....	1	1	2	1	1	2
Diseases of the nervous system:						
Diseases of the meninges				2		2
Organic diseases of the brain (tumor, abscess, embolism, thrombosis, hemorrhage and other gross lesions).....	2	2	4	4	5	9
Mental diseases:						
Exhaustion of acute mental disease	7	3	10	14	6	20
Exhaustion of chronic mental disease						
General paralysis of the insane..	3		3	7	1	8
Malignant new growths or cancer..					2	2
Total	21	8	29	42	22	64

TABLE No. 8

Showing hereditary tendency to insanity in patients admitted during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Paternal branch.....	4	5	9	22	26	48
Maternal branch.....	6	3	9	22	28	50
Paternal and maternal branches.....	1	.....	1	6	.....	6
Collateral branches.....	9	11	20	27	43	70
No hereditary tendency..	21	25	46	102	123	225
Unascertained.....	14	8	22	95	45	140
Total.....	55	52	107	274	265	539

TABLE No. 9

Showing civil condition of patients admitted during the current year and since October 1, 1888

CIVIL CONDITION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Single.....	30	21	51	140	86	226
Married.....	18	25	43	98	129	227
Widowed.....	4	6	10	23	50	73
Divorced.....	1	.....	1	4	.....	4
Unascertained.....	2	.....	2	9	.....	9
Total.....	55	52	107	274	265	539

TABLE No. 10

Showing degree of education of patients admitted during the current year and since October 1, 1888

DEGREE OF EDUCATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Collegiate				6	3	9
Academic		2	2	9	16	25
Common school	49	49	98	190	190	380
Read and write	1		1	13	21	34
Read only	4	1	5	18	11	29
No education				17	13	30
Unascertained	1		1	21	11	32
Total	55	52	107	274	265	539

TABLE No. 11
Showing the duration of insanity previous to admission, and the period under treatment of patients who died during the current year and since October 1, 1888

	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	DURATION PREVIOUS TO ADMISSION			DURATION PREVIOUS TO ADMISSION		
	Men	Women	Total	Men	Women	Total
Under one month.....	1	1	2	2	1	3
One to three months.....	2	1	3	2	1	3
Three to six months.....	3	.....	3	4	.....	4
Six to nine months.....	1	.....	1	1	.....	1
Nine months to one year.....	3	.....	3	5	.....	5
One year to eighteen months.....	1	.....	1	2	.....	2
Eighteen months to two years.....	1	1	2	3	2	5
Two to three years.....	.....	.....	.....	1	1	2
Three to four years.....	.....	.....	.....	4	2	6
Four to six years.....	1	2	3	2	1	3
Six to ten years.....	3	.....	3	4	4	8
Ten to twenty years.....	3	1	4	5	1	6
Twenty years and over.....	1	.....	1	6	7	13
Not insane*.....	1	.....	1	3	.....	3
Unascertained.....	.....	2	2	1	.....	1
Total.....	21	8	29	42	22	64
Average duration of insane life (giving years and tenths).....	7.5	5.9	6.7	.....	.....	.....
				7.8	7.4	7.6

* Includes cases of alcoholism, drug habit, etc.

TABLE No. 12

Showing ages of those admitted during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....				1	1	2
From 15 to 20 years.....	3	3	6	15	6	21
From 20 to 25 years.....	6	4	10	20	13	33
From 25 to 30 years.....	5	1	6	20	14	34
From 30 to 35 years.....	6	5	11	24	23	47
From 35 to 40 years.....	6	8	14	27	35	62
From 40 to 50 years.....	12	8	20	72	62	134
From 50 to 60 years.....	6	13	19	45	54	99
From 60 to 70 years.....	8	9	17	29	41	70
From 70 to 80 years.....	3	.....	3	15	14	29
From 80 to 90 years.....	.....	1	1	6	2	8
Total	55	52	107	274	265	539

TABLE No. 13

Showing ages of those discharged recovered during the current year
and since October 1, 1888

AGE	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 20 years.....				6	.....	6
From 20 to 30 years.....	3	3	6	11	9	20
From 30 to 40 years.....	2	2	4	4	8	12
From 40 to 50 years.....	5	.....	5	13	2	15
From 50 to 60 years.....	1	1	2	3	4	7
From 60 to 70 years.....	.....	.....	.....	.....	1	1
Total	11	6	17	37	24	61

TABLE No. 14

Showing ages of patients who died during the current year and since
October 1, 1888

AGE	YEAR ENDING SEPT. 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
From 10 to 15 years.....					1	1
From 15 to 20 years.....		1	1		1	1
From 20 to 25 years.....	1		1	1		1
From 25 to 30 years.....						
From 30 to 35 years.....	2		2	3	1	4
From 35 to 40 years.....	1		1	2	1	3
From 40 to 50 years.....	2		2	7	2	9
From 50 to 60 years.....	6	3	9	10	6	16
From 60 to 70 years.....	3	3	6	10	4	14
From 70 to 80 years.....	3		3	4	5	9
From 80 to 90 years.....	3	1	4	5	1	6
Total	21	8	29	42	22	64

TABLE No. 15

Showing alleged duration of insanity previous to admission of patients
admitted during the year ending September 30, 1901

DURATION OF INSANITY	Men	Women	Total
Under one month.....	6	11	17
One to three months.....	10	5	15
Three to six months.....	2	.....	2
Six to nine months.....	3	1	4
Nine months to one year.....	5	1	6
One year to eighteen months.....	2	.....	2
Eighteen months to two years.....	2	3	5
Two to three years.....	2	3	5
Three to four years.....	.....	2	2
Four to five years.....	3	4	7
Five to ten years.....	6	7	13
Ten to fifteen years.....	1	6	7
Fifteen to twenty years.....	4	6	10
Twenty to thirty years....	2	2	4
Thirty years and upwards.....	1	1	2
Not insane*.....	3	.....	3
Unascertained.....	3	.....	3
Total.....	55	52	107

* Includes cases of alcoholism, morphia habits, etc.

TABLE No. 16

Showing period of residence in asylum of patients remaining under treatment September 30, 1901

PERIOD OF RESIDENCE	Men	Women	Total
Under one month.....	2	3	5
One to three months.....	6	2	8
Three to six months.....	6	13	19
Six to nine months.....	5	2	7
Nine months to one year.....	20	20	40
One year to eighteen months.....	7	13	20
Eighteen months to two years.....	5	13	18
Two to three years.....	40	118	158
Three to four years.....	76	.....	76
Total.....	167	184	351

TABLE No. 17

Showing the occupation of those admitted during the current year and since October 1, 1888

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Professional:						
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc.....	3	1	4	8	2	10
Commercial:						
Bankers, merchants, accountants, clerks, salesmen, shopkeepers, shopmen, stenographers, typewriters, etc.....	9	1	10	33	1	34

Table No. 17—(Concluded)

OCCUPATION	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
Agricultural and pastoral: Farmers, gardeners, herdsmen, etc.	8	.....	8	75	....	75
Mechanics at outdoor vocations: Blacksmiths, carpenters, engine-fitters, sawyers, painters, police, etc.	4	.....	4	35	.....	35
Mechanics, etc., at sedentary vocations: Bootmakers, bookbinders, compositors, weavers, tailors, bakers, etc.	5	.....	5	18	2	20
Domestic service: Waiters, cooks, servants, etc.	.....	16	16	....	68	68
Educational and higher domestic duties: Governesses, teachers, students, housekeepers, nurses, etc.	.....	23	23	2	164	166
Commercial: Shopkeepers, saleswomen, stenographers, typewriters, etc.	.....	.....	.....	1	.....	1
Employed in sedentary occupation: Tailoresses, seamstresses, bookbinders, factory workers, etc.	.....	6	6	2	11	13
Laborers	20	.....	20	70	.....	70
No occupation	5	5	10	27	16	43
Unascertained	1	....	1	3	1	4
Total	55	52	107	274	265	539

TABLE No. 18

Showing the nativity of patients admitted during the current year and since October 1, 1888

NATIVITY	YEAR ENDING SEPTEMBER 30, 1901			SINCE OCTOBER 1, 1888		
	Men	Women	Total	Men	Women	Total
United States.....	38	37	75	188	173	361
Scotland					1	1
Bohemia	1		1	1		1
Holland.....				1	1	2
Germany.....	3	5	8	11	14	25
Poland.....				1		1
Ireland.....	5	4	9	20	23	43
Switzerland					1	1
England		1	1	5	5	10
Norway.....					1	1
Italy.....	1		1	2		2
Denmark.....					1	1
Sweden	6	5	11	23	17	40
Canada				3	4	7
Russia	1		1	1		1
Nova Scotia					1	1
Austria				1		1
Unknown				17	23	40
Total	55	52	107	274	265	539

Of the total number admitted since the 1st of October, 1888, the parents of .34 per cent were both of foreign birth.

In .035 per cent the parentage on the paternal side was foreign, while that on the maternal side was native.

In .01 per cent the parentage on the maternal side was foreign, while that on the paternal side was native.

TABLE No. 19

Showing the residence by counties and classification of patients
admitted during the year ending September 30, 1901

COUNTIES	Public	Private	Total
Albany			
Allegany			
Broome			
Cattaraugus	24		24
Cayuga			
Chautauqua	49		49
Chemung	1		1
Chenango			
Clinton			
Columbia			
Cortland			
Delaware			
Dutchess			
Erie	5		5
Essex			
Franklin			
Fulton			
Genesee	2		2
Greene			
Hamilton			
Herkimer			
Jefferson			
Kings			
Lewis			
Livingston			
Madison			
Monroe			
Montgomery			
Nassau			
New York	10	1	11
Niagara			
Oneida			
Onondaga			
Ontario			
Orange	8		8
Orleans			
Oswego			
Otsego			
Putnam			
Queens			
Rensselaer			
Richmond			

Table No. 19—(Concluded)

COUNTIES	Public	Private	Total
Rockland			
St Lawrence			
Saratoga	1		1
Schenectady			
Schoharie			
Schuyler			
Seneca			
Steuben			
Suffolk	2		2
Sullivan	1		1
Tioga	1		1
Tompkins			
Ulster			
Warren			
Washington			
Wayne	1		1
Westchester			
Wyoming	1		1
Yates			
Soldiers' Home			
Total	106	1	107

TABLE No. 20

Showing the residence by counties and classification of patients
remaining under treatment September 30, 1901

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Albany.....						
Allegany.....						
Broome.....						
Cattaraugus.....	52	59	111			
Cayuga.....						
Chautauqua.....	85	97	182		1	1
Chemung.....	1		1			
Chenango.....						
Clinton.....						
Columbia.....						
Cortland.....						
Delaware.....						
Dutchess.....						
Erie.....	8	8	16			
Essex.....						
Franklin.....						
Fulton.....						
Genesee.....		3	3			
Greene.....						
Hamilton.....						
Herkimer.....						
Jefferson.....						
Kings.....						
Lewis.....						
Livingston.....						
Madison.....						
Monroe.....	2	2	4			
Montgomery.....						
New York.....	7		7			
Niagara.....	1		1			
Oneida.....						
Onondaga.....	5		5			
Ontario.....						
Orange.....	1	7	8			
Orleans.....						
Oswego.....						
Otsego.....						
Putnam.....						
Queens.....						
Rensselaer.....						
Richmond.....	1		1			

Table No. 20—(Concluded)

COUNTIES	PUBLIC			PRIVATE		
	Men	Women	Total	Men	Women	Total
Rockland.....						
St Lawrence.....						
Saratoga.....		1	1			
Schenectady.....						
Schoharie.....						
Schuyler.....						
Seneca.....						
Steuben.....		1	1			
Suffolk.....		2	2			
Sullivan.....		1	1			
Tioga.....						
Tompkins.....						
Ulster.....						
Warren.....						
Washington.....						
Wayne.....		1	1			
Westchester.....						
Wyoming.....	1	1	2			
Yates.....						
Unascertained.....	3		3			
Total.....	167	183	350		1	351

NINTH ANNUAL REPORT
OF THE
State Charities Aid Association
TO THE
State Commission in Lunacy
NOVEMBER 1, 1901

STATE CHARITIES AID ASSOCIATION

OFFICERS—1901-1902

PROF. GEORGE F. CANFIELD.....	President
MRS. WILLIAM B. RICE.....	Vice-President
HON. JOSEPH H. CHOATE.....	Vice-President
MISS LOUISA LEE SCHUYLER.....	Vice-President
HON. CHARLES S. FAIRCHILD.....	Treasurer
MRS. HENRY OOTHOUT.....	Librarian
MR. HOMER FOLKS.....	Secretary
MISS MARY VIDA CLARK.....	Assistant Secretary

MANAGERS

Term expires 1902

DR. CHARLES HITCHCOCK	MR. JOHN A. McKIM
MR. FRANCIS C. HUNTINGTON	MISS RUTH MORGAN
MR. CHARLES H. MARSHALL	MRS. HENRY OOTHOUT
MRS. WILLIAM B. RICE	

Term expires 1903

HON. CARL SCHURZ	MR. FELIX M. WARBURG
MISS LOUISA LEE SCHUYLER	DR. GEORGE G. WHEELOCK
MR. P. TECUMSEH SHERMAN	HON. ALFRED T. WHITE
MRS. MARY HATCH WILLARD	

Term expires 1904

MRS. TUNIS G. BERGEN	PROF. GEORGE F. CANFIELD
MISS M. KATE BRICE	HON. JOSEPH H. CHOATE
MISS HELEN C. BUTLER	HON. CHARLES S. FAIRCHILD
MRS. WM. PIERSON HAMILTON	

COMMITTEE ON THE INSANE

PROF. GEORGE F. CANFIELD, *Chairman*

MISS MARY VIDA CLARK, *Secretary*

MISS M. KATE BRICE	DR. CHARLES HITCHCOCK
PROF. CHARLES F. CHANDLER	MR. FRANCIS C. HUNTINGTON
DR. CHARLES L. DANA	MISS RUTH MORGAN
HON. CHARLES S. FAIRCHILD	MRS. WILLIAM B. RICE
MISS LOUISA LEE SCHUYLER	

VISITORS TO STATE HOSPITALS

UTICA STATE HOSPITAL

DR. W. E. FORD, 266 Genesee street, Utica

PRES. M. W. STRYKER, Hamilton College, Clinton

WILLARD STATE HOSPITAL

Mrs. CLARA E. FIELD, Hector
Pres. ROBERT ELLIS JONES, Hobart College, Geneva

HUDSON RIVER STATE HOSPITAL

Miss MYRA H. AVERY, 137 Academy street, Poughkeepsie
Miss GEORGINA A. JACKSON, Catskill
Miss MARY L. VAN ORDEN, Catskill

MIDDLETOWN STATE HOSPITAL

Mr. H. W. MUNROE, Tuxedo
Mrs. H. W. MUNROE, Tuxedo
Mr. PAUL TUCKERMAN, Tuxedo
Mrs. PAUL TUCKERMAN, Tuxedo

BUFFALO STATE HOSPITAL

Mrs. BERNARD BARTOW, 481 Delaware avenue, Buffalo
Miss ADA M. KENYON, 395 Prospect avenue, Buffalo
Dr. WILLIAM C. KRAUSS, 371 Delaware avenue, Buffalo
Hon. GEORGE A. LEWIS, 268 Elmwood avenue, Buffalo

BINGHAMTON STATE HOSPITAL

Mr. FRED H. HASKINS, Binghamton
Mr. CHARLES E. LEE, Front street, Binghamton

ST. LAWRENCE STATE HOSPITAL

Captain FRANK CHAPMAN, Ogdensburg
Miss HARRIET L. HASBROUCK, Ogdensburg
Mr. GEORGE W. KNOWLTON, 11 Clinton street, Watertown
Mrs. GEORGE W. KNOWLTON, 11 Clinton street, Watertown

ROCHESTER STATE HOSPITAL

Dr. ROBERT G. COOK, 45 Park avenue, Rochester
Mrs. H. G. DANFORTH, 535 West avenue, Rochester
Mrs. A. H. HARRIS, 28 North Goodman street, Rochester
Prof. SAMUEL A. LATTIMORE, University of Rochester, Rochester.

LONG ISLAND STATE HOSPITAL

Mr. FRANK L. BABBOTT, 149 Lincoln place, Brooklyn
Miss MARGARET D. DREIER, 6 Montague terrace, Brooklyn
Rev. JOHN C. YORK, Huntington

MANHATTAN STATE HOSPITAL

Dr. ALBERT WARREN FERRIS, 343 Madison avenue, New York
Miss FLORENCE M. RHETT, 122 East 34th street, New York

GOWANDA STATE HOSPITAL

Mrs. WILLIAM BOOKSTAVEN, Dunkirk
Rev. WILLIAM P. HELLINGS, Jamestown
Mrs. GEORGE W. PATTERSON, Westfield
Mrs. HARVEY TEW, Jamestown
Hon. W. E. WHEELER, Portville

REPORT

NEW YORK, November 1, 1901

To the State Commission in Lunacy

The State Charities Aid Association respectfully submits its ninth annual report:

The following table shows the total number of insane persons in State hospitals and private asylums on October 1, 1901, to have been 24,354, an increase of 576 over the previous year. Of this total number, 22,654 patients were in the eleven State hospitals (not including Matteawan and Dannemora), being 566 more than on October 1, 1900.

Census of State Hospitals and Private Institutions, October 1, 1901

Utica	1,148
Willard	2,236
Hudson River	2,094
Middletown	1,237
Buffalo	1,913
Binghamton	1,350
St. Lawrence	1,671
Rochester	581
Long Island	3,975
Manhattan	6,098
Gowanda	351
	<hr/>
	22,654
Matteawan and Dannemora (criminal insane).....	733
Private institutions	967
	<hr/>
Grand total	24,354
	<hr/> <hr/>

Early in the session of 1901 a bill was introduced relating to the qualifications of the president of the State Commission in Lunacy. The Insanity Law provided that this officer should be "a reputable physician, a graduate of an incorporated medical college, of at least ten years' experience in the actual practice of his profession, who has had five years' actual experience in the care and treatment of the insane, and who has had experience in the management of institutions for the insane." The bill proposed to strike out the provisions which required, as qualifications, "five years' actual experience in the care and treatment of the insane" and "experience in the management of institutions for the insane." It was felt by the association that such qualifications were reasonable requirements, and that any physician not possessing them would not be fit for the highly responsible duties of the president of the State Commission in Lunacy, particularly those pertaining to the discharge of patients improperly detained. After a full and careful consideration of the subject and two hearings before committees of the Senate and the Assembly, the bill was considerably modified, and in the right direction, before becoming law. The bill which became a law requires that the president of the commission "shall be a reputable physician, a graduate of an incorporated medical college, of at least ten years' experience in the actual practice of his profession, who has had five years' actual experience in the treatment of mental and nervous diseases, or who has had two years' experience in the care and treatment of the committed insane." The association considers this a great improvement over the provisions of the original bill.

The association is now represented by visitors to all the State hospitals. It has thirty-five such visitors who are doing admirable work in behalf of the dependent insane. Each one of these forms an intelligent centre of interest and faith in the State care system, and helps to spread abroad a wider knowledge of the State hospitals and to give them the popularity they deserve. Extracts from the annual reports of our visitors are printed on pages 10 to 42 of this report. Working

independently of one another, our visitors from all parts of the State unite in commending the management of these institutions, and in deploring their serious overcrowding. Every State hospital is reported as accommodating from 100 to 500 more patients than it properly has room for.

It is generally supposed that this congested condition will cease with the completion of the new buildings now under way at various State hospitals. Unhappily, there seems to be no ground for a belief in any such fortunate outcome of our present difficulties.

In our last year's report we called attention to the fact that with the completion of the new buildings and additions to buildings now planned by your honorable Commission, there would probably still be on October 1, 1903, 600 patients in the State hospitals in excess of their certified capacity. The situation two years later (in 1905) would be still more serious, for in addition to the 1,400 additional patients who at the present rate of annual increase will be under treatment at that time, there will be 1,100 patients unhoused by the expiration in 1905 of the State's lease of the property at Flatbush. In the next four years therefore the State must provide accommodations for 3,100 patients.

It is certainly none too early to consider seriously how this burden is to be borne. There are several methods open to us. The line of least immediate resistance, and the one which would presumably be followed if the situation were not viewed in its entirety, is the one which has been followed almost exclusively since the completion of the State care system; we refer to the enlargement of existing State hospitals. With the completion, however, of the building operations already started, there will be no State hospital with a population of less than a thousand, and with the possible exception of the Rochester and Gowanda State hospitals there will be none which should be further enlarged. The proper size of such an institution is a question regarding which there is difference of opinion, and which cannot perhaps be determined with absolute certainty, but for a

variety of reasons those who study this subject from both the humanitarian and the economical point of view believe that the capacity of State hospitals should range between one thousand and fifteen hundred. With fewer than one thousand patients a satisfactory classification is impossible without great expense. With more than fifteen hundred the medical superintendent must unduly sacrifice scientific to executive interests; the difficulty of properly employing, entertaining and otherwise caring for the individual patient is increased, and there is little or no compensating decrease in the expense of administration and maintenance. Perhaps no one consideration is of more importance in determining the limit of growth of any individual State hospital than the amount of land which it possesses. The large amount of land at Central Islip, Kings Park, Willard and Hudson River partly justifies these institutions in accommodating, as they do, between two and three thousand patients, while the lack of land and the nearness to cities makes it undesirable for most of the other State hospitals to grow beyond their present size, which in several cases is already excessive.

There is no question of the necessity of new hospitals. The only question is as to what sort of hospitals we shall provide for the thirty-one hundred patients that must be accommodated by 1905. Certainly the property occupied by the Long Island State Hospital in Brooklyn, which must be vacated by 1905, and which under any circumstances it would not be desirable for the State to retain, should be replaced by a new hospital. Whether this new hospital should be located on Long Island or elsewhere is an open question. Probably the six thousand patients already provided for at Central Islip and Kings Park are as many as it is desirable to send to this locality. It might be better to choose for a new hospital a site, either in one of the Hudson river counties or in the central part of the State, where the land is better, the railroad facilities are greater and the patients are more easily accessible to their friends. If two new State hospitals were built, sites in both of these sections might be chosen.

We would repeat our recommendations of last year that for the examination of the alleged insane and for the treatment of incipient and acute cases there should be established in cities of the first and second class small reception or psychopathic hospitals, with dispensary and out-patient departments. In New York city it would be desirable to have two such hospitals—one in the borough of Manhattan for not more than from one hundred to two hundred patients, and one in the borough of Brooklyn for not more than from fifty to one hundred patients. Hospitals of the latter size would probably be best suited to the needs of Buffalo and the cities of the second class. In this way from four hundred to eight hundred patients could be cared for outside the large State hospitals, which would be relieved to that extent.

It is unnecessary to enter here into the reasons for the establishment of such hospitals. The matter was discussed in our last year's report to your honorable Commission, and has been fully treated in a number of papers written by your president, Dr. Frederic Peterson. Such hospitals would clearly furnish the most advantageous way of treating incipient and acute insanity. They would command the gratuitous services of the best trained neurologists and alienists in the State as visiting physicians; they would make possible the preventive treatment of nervous cases before actual insanity could be alleged, and the remedial treatment of the insane in the early stages of the disease. In New York city they would do away with the necessity of sending patients to the pavilion at Bellevue Hospital, where they have been subjected to abuses that have been emphatically condemned by public sentiment. The establishment of such hospitals could hardly fail to result in an important reduction in the number of patients admitted to State hospitals.

For the board of managers.

MARY VIDA CLARK

Secretary of the Committee on the Insane

EXTRACTS FROM REPORTS OF VISITORS OF THE ASSOCIATION
TO STATE HOSPITALS

UTICA STATE HOSPITAL

The committee appointed by your board to examine the State Hospital for the Insane at Utica, N. Y., would respectfully report that on the 5th day of November, 1901, they made a visit to the hospital, examined the buildings, inspected the inmates, and observed in general the workings of the hospital in detail. On other occasions, and quite frequently, one of the members of the committee has been at the hospital, and has been for several years familiar with the methods pursued there, and more or less conversant with the results obtained.

It is the opinion of your committee that the hospital itself is in admirable condition as to its sanitary and housekeeping arrangements. It is overcrowded, and, from what we can learn, it is generally overcrowded, so that the facilities for anything like hospital work there seem to be restricted by this fact. The custody of a large number of people who have passed through the acute active processes of insanity, and who remain for the rest of their lives in a state of terminal dementia, entails a large amount of work and inspection that must fall upon the medical officers, with the result that their energies are so largely expended in non-medical matters that there is little left for true hospital work.

Acute insanity, it seems to your committee, should be treated somewhat as acute illnesses are in other hospitals, and receive extraordinary care, which might be necessary for a short period, in order to prevent a lifelong chronic ailment. With the small staff of medical men attached to the average State hospital with ten or twelve hundred patients, the majority of whom are simply under custodial treatment, the chances for the recovery of patients with acute insanity must be less than they would be in a separate building apart from the hopeless classes, where the cases could be individualized and medically treated while they were in danger, without reference to the cost per capita.

It is believed that better results could be obtained in the treatment of these important cases of acute insanity if a separate building could be erected where they could be cared for, and where ample medical supervision and abundant supplies could be controlled by skilled medical men, the same as is done in general hospitals where acute illnesses are treated at a large expense.

There is no indication, so far as we can find, that any improper methods are being employed, or that any political influences are used to the detriment of the hospital work; or that there is any want of supervision on the part of the very intelligent Board of Managers attached to this institution.

November 11, 1901

M. W. STRYKER

WILLIS E. FORD, M. D.

WILLARD STATE HOSPITAL

During the past year I have paid considerable attention to the condition of affairs at the Willard Asylum, and I find everything to commend in the management of the institution from a medical point of view; except those minor deficiencies, which are caused by the inadequateness of the per capita appropriation. There have been recurrent outbreaks of diphtheria, the cause of which cannot be easily arrived at. The State should appropriate a sufficient sum for a searching investigation and a radical improvement of the conditions.

Comparatively little is purchased directly by the representatives of the hospital, as most of the purchasing is under joint contract, and is undertaken by a committee of stewards, usually associated with an advisory council or committee of superintendents. On this committee the Willard State Hospital has not been represented for a number of years. There are cases where this joint method of purchasing does act to the advantage of the hospitals in getting lower prices, but it has not been conclusively shown that in all cases this method of purchasing supplies has been to the best advantage, particularly as there

is a great difference in freight rates and transportation as between the hospitals, and certain supplies can be bought to very much greater advantage in some sections than in others. Where a combination of railroads run into a large city or town near a hospital, this results in the said hospital being able to get supplies at greater advantage by reason of competitive freight rates. Such location sometimes affects a hospital in its being able to obtain supplies very much lower than the same hospital could obtain them even under a joint contract, as in many cases the contractor under joint contract has an opportunity to even up by raising the price at that particular hospital while cutting down somewhere else. In other cases the cause for the low price of supplies is rather on account of the hospital being nearer the great centres, or nearer to where some supplies are produced. Willard Hospital, for instance, can usually do very much better in vegetables, hay, straw, corn, salt, beans and possibly some other supplies than almost any other hospital in the State by reason of its location, and because of the particular method followed in supplying breadstuffs by either growing or purchasing winter wheat in this locality and blending the flour made at a nearby roller mill with the spring wheat patent flour purchased in the open market. I think that Willard Hospital has up to this time been able to produce all its breadstuffs at a very much lower rate than any other hospital in the State, and has found it advantageous to join in the methods pursued in regard to the purchasing of flour, etc., with the other hospitals. There are certain other staples that are controlled by the trusts, and where the price is either uniform with the other hospitals, or where Willard is able to get just as good a figure as any other customer not especially favored by the combination, and possibly as good a price as any one. It must be remembered in this connection that furniture, clothing and many other things which were formerly purchased, are now made by the prisons, and the hospital has to accept these whether they are good, bad or indifferent, provided, of course, that the deliveries are not too much below a certain standard.

This, as you are probably aware, results in our having exceedingly slow deliveries and in our getting extremely behind at times, and having patients' clothing of much poorer material than formerly, and our going back to something more like the old "uniform" appearance, than has been the case for many years. These goods are more expensive than the similar class of goods formerly purchased in the open market, but as the standard sample and price of the goods is fixed by the Board of Classification, under the law, there is no redress to the institution.

No new buildings of any importance have been erected lately at the hospital. Such work as has been carried on has been usually work where the management was undertaken by the hospital, additional help being obtained at daily wages.

October, 1901

ROBERT ELLIS JONES

HUDSON RIVER STATE HOSPITAL

At the last visit made to the Hudson River State Hospital there were found to be over 2,000 patients registered, and of these there were about 400 men and 578 women in the Administration Building, 200 each of men and of women in the eight cottages, and about 400 men and 275 women in the Central Group.

The new dormitory for the old and feeble women in the main building has just been occupied. It communicates directly with the long, enclosed porch connecting with ward eleven.

The sun room for ward two is nearly completed, and will be a great addition to the comfort of the patients.

The recommendation of the Superintendent that a cottage now upon the grounds be fitted up as a home for convalescent patients, seems an excellent one, which should be acted upon without delay.

The questions of sewage disposal, and of a pure water supply at the cottages, are important and urgent.

MYRA H. AVERY

BUFFALO STATE HOSPITAL

The Buffalo State Hospital was located on the outskirts of a city which has grown to it, and on every side pressed far beyond; and yet so farsighted were those who purchased the grounds that the hospital has all the appearance of isolation. The grounds are beautiful, resembling those of a fine private residence. There has been no intention to improve the appearance of the grounds at the expense of the comfort of the patients, for every fine day numbers of these are seen, sometimes seated in the pavilions, sometimes on the grass under the fine old trees, and quite often games are in progress among the men that while away many hours in healthful exercise and cheerful entertainment. The patients are nearly always occupied in some way. The men work on the grounds in pleasant weather, and manufacture many things—brooms, brushes, mats and other articles used in the institution. The women work in the laundry, clean and scrub the wards, and do kitchen work other than cooking; other occupations are sewing, knitting, crocheting, even painting and the making of many fancy articles, some of which are given away and some sold. The list of articles made in the Buffalo Hospital is a long and creditable one, and would be a surprise to many people who think that the insane are incapable of any useful employment.

Religious services, both Roman Catholic and Protestant, are held for the inmates. No school instruction is at present given, as there seems to be no call for such work. Entertainments are furnished during the winter months. During the past summer many of the patients have been taken to the Pan-American Exposition under proper escort. A library of one thousand volumes is open, from which books can be drawn at stated intervals. Two pool tables for the men and several pianos in different parts of the building for the use of the women bring pleasure into their lives. The pleasant relations constantly shown to exist between the staff and the patients must also add greatly to the comfort of the latter.

The personnel of the attendants is of a higher grade than

formerly, owing no doubt to the Training School, where instruction is given, fitting pupils for positions where skill and judgment are required. The class each year is formed of those who have been attendants during the year preceding. Lectures and recitations begin October 1st and continue until May 1st; the practical work continues throughout the year, pupils having a regular tour of duty in reception wards, in the infirmary and the operating wards, as well as the ordinary duties of attendants. The subjects of lectures are those given in all training schools, and include bacteriology, Swedish movement and massage and a primary course in psychology. Arrangements have been made whereby a number of the graduates of this school receive additional training and do special work at the Woman's Hospital in the city, and a number of these students are now doing private work in different parts of the country, in cases where special training for nervous or mental diseases is required. During the past year there were eighteen men and fifty women enrolled in the Training School, ten men and twenty-six women receiving diplomas in June, 1901. This is certainly a great advance over the time within the memory of some of us when the main requirements of an attendant in an insane asylum were an iron wrist and a hand of steel.

The food has always been found of an excellent quality, the bread light and palatable. The printed dietary shows a wide range of food furnished all classes in the hospital. In addition, the sick have a special kitchen and a dietary provided according to their needs.

Few cases of restraint have been noticed. Occasionally a very disturbed patient is found to be confined in a room, or more often under a protection sheet, though even these are of comparatively rare occurrence. The privilege of "parole" is frequently given to patients; but from the situation and construction of the Buffalo Hospital, the "open door" is an impossibility. It would be a veritable open door to the tramps and outlaws, who always congregate in a large city, and who would find congenial hiding places in the dark and warm cellars

and passages of such a great building. Police supervision has been necessary during the summer to drive such persons from the nooks and angles outside the buildings and the shrubbery on the grounds.

The dormitories are in the best possible condition, considering that they are crowded far beyond the original design. The habit of leaving the mattresses uncovered, open to the cleansing influence of a current of fresh air during the day, cannot be too highly commended. The bedding, too, should be subjected to the same regimen, as well as the night clothing of the patients, but even this could not bring about a perfect condition where the head of one cot touches the foot of the next through each entire line, and there is a passageway only one way in a dormitory, and that scarcely sufficient for a full-grown person. One room, 25 by 30 feet, with about a fourteen-foot ceiling, with eight windows, has 30 beds in use; another, 26 by 16, has 13 beds in use; one room, 21 by 10, with but one window, has six beds in use, and nearly all of the rooms in the hospital originally designed as sitting-rooms have been turned into crowded bedrooms. Rooms that should contain but two cots at most are made to hold three and four, and even the corridors, originally intended for passageway only, are pressed into use as sleeping apartments. The capacity of any building is a movable number, and varies with circumstances. On the last visit of the State Commission the capacity of the Buffalo Hospital was decided to be 1,873; and on October 1, 1901, the population was recorded as 1,891. The proper capacity is probably considerably less.

The needs of the hospital are many. An entertainment pavilion outside, that would be more accessible and attractive than the room now in use, is very desirable. This need not be an elaborate building. A new lecture-room is needed at the Elmwood building, and with this a partition could be placed in the present room and nurses could be comfortably accommodated. The present Nurses' Home provides room for only a portion of the nurses, and the others have slept in rooms over

the kitchen and over the laundry. A dining-room also at the Reception Building is a positive necessity.

Again we wish to direct attention to the fact that our Superintendent should have a modest house where he could retire for needed rest and refreshment; a staff building would also be a desirable addition to the outfit of the hospital. But there is one crying need that in the name of humanity should not longer be unheeded, and that is a pavilion where consumptive cases could be isolated and have proper care. This need was especially brought to the attention of the committee during a recent visit by the pathetic sight of such a patient in the last stages of consumption "isolated" in a corridor through which passed people with hasty steps and averted faces, eager only to get away from their suffering sister. What a commentary to her on Christian charity, one that should never have been forced on her notice. This pavilion should not be an expensive one, for it should not be too costly to destroy when evidence should appear that it might be so infected as to be dangerous, but a bright, airy convenient building for the purpose is demanded in the name of humanity.

In conclusion, we wish to bear testimony to the uniform kindness and courtesy of the Superintendent, Dr. Hurd, and his staff. We consider the hospital to be very fortunate in possessing physicians of such marked ability and efficiency, who have always shown, not only intelligent attention to the work of your committee, but thoughtfulness and kindness for the unfortunates whom the State has placed in their care.

November, 1901

FANNY H. BARTOW

ADA M. KENYON

WM. C. KRAUSS, M. D.

GEORGE A. LEWIS

BINGHAMTON STATE HOSPITAL

Your committee spent the afternoons of October 25th and 29th at the hospital. On our first visit we confined our inspection to the main building and adjacent cottages and buildings. The work of the medical and administration staff is admirably arranged and executed. It was a wonder to us that such thorough and systematic work could be carried on with such perfection of detail by so small a staff. The question of a separate building for administration purposes has been under advisement, but it was our judgment that the money would be more wisely expended in providing more room for inmates, for we were impressed in nearly every ward with what appeared to be overcrowding. This was especially noticed in the turbulent wards in the Main Building and the parole wards of the East Building. It seemed plain that these wards held twice as many patients as they should. The acute ward was also too full. Even with the overcrowding, the order kept and the sanitation observed seemed most commendable. The bath and toilet-rooms were in perfect condition. The plan generally followed now in the wards is to have the beds open during the day, so that until 5 to 6 p. m. all of the bedding shall have ample chance to be aired. Dormitory windows are left open, where practical, for a free circulation of fresh, cool outdoor air. We wish to commend especially the fire appliances and fire-escapes.

In the North Building the arrangements for day and night rooms (separated by partial partitions that allow free circulation of air over and under them) seem to be ideal in design. We were gratified to learn that this arrangement was designed by the Superintendent, and carried out by using the labor of regular employees and attendants, at an extremely moderate cost. A new structure known as the Manufacturing Building is nearly completed at a cost of \$5,500. The work was done by regular employees and patients, and the cost, considering the size of the building and the excellent class of work and material, seems very low. The principal use of the building will be for a tailor shop—power sewing machines being used—and the arrangement as far as completed at this writing is a model one.

The systematic operation and sanitary condition of the laundry make that department practically perfect. A disinfecting apparatus would be a desirable addition.

The dispensary, meat market, supply rooms, cold storage and artificial ice plant, greenhouses, stables, fire department were all in the most excellent condition and well managed.

We wish to commend especially the kitchen arrangements. That department is under a trained cook who instructs a cooking class of nurses and attendants. The cleanliness of all the dining-rooms, the arrangements for training nurses, the plans for amusing the patients—by walks for exercise, by open air concerts and by regular Friday night dances; the removal as far as possible of all signs of restraint, such as iron window gratings, and the substitution of window shades, curtains and draperies, the hanging of pictures upon the walls and the placing of potted plants in pleasing positions in the wards, all make for the well-being of the patients.

Ample provision is made for religious worship by regular services in the Assembly Building. The use for worship of the former chapel (situated on the top floor of the Main Building) has been discontinued on account of the superior conveniences and capacity of the Assembly Hall. The old chapel seems to be the only unused space under roof in the whole plant.

At our second visit we inspected the colonies (three in number) and found the same signs of system, neatness and order that were noticeable at the main plant. The amount of supplies raised on the farms and in the gardens seemed large, and must make a beneficial showing in the condition of the inmates as well as in the economics of the institution.

The census at the time of our visit was:

Inmates (male 645, female 704).....	1,349
Employees and attendants.....	298
Superintendent and staff	8
	<hr/>
Total	1,655
	<hr/>

October 30, 1901

FRED H. HASKINS
CHARLES E. LEE

ST. LAWRENCE STATE HOSPITAL

Your committee, recently appointed to visit the State Hospital in Ogdensburg, made their first call at the institution November 11th.

The Superintendent accompanying us, we started on our tour of inspection, and were first ushered into a bright, cheerful room, filled with growing plants. There were rugs on the floor and easy chairs standing about. A side door opened out on to the grounds, and we were told that this was where patients first entered, because it was desirable to have them come into a cheerful room, and have their first impression pleasant, and not have them too much impressed with the institutional idea. There is no deception, however. All inmates are told in the beginning, when the attendant goes for them, that they are to be taken to a State hospital, and every effort is made to have them understand the true conditions, both as regards themselves and the institution, but after they become inmates there is never any allusion to the fact of any mental infirmity. It is considered desirable to have those afflicted lose the idea as much as possible, and while it is not always possible, the doctors and attendants, in their treatment and intercourse, ignore it as far as is consistent with what is best for the patient. When patients are received into the hospital they are at once placed under the special care of one of the medical staff, whose business it is to note particularly all the symptoms and conditions as they relate to that particular patient.

Full records are kept and every symptom noted and put down, and every hour tabulated, and this continues night and day for a period of ten or twelve days. When the nature of the case is determined, the patient is assigned to a proper ward, and from that time on all that can be seems to be done to restore health, both physical and mental.

At noon of each day all the staff meet with the Superintendent in his office, and each case is reported on and considered, and all that is of interest relating to the patients is talked over. The conference is a sort of council, where plans and methods are

discussed, and all matters relating to the management can come up for consideration.

We visited in turn all the wards and found them clean and in perfect order. We were impressed with the importance of system in the management of such an institution, and there were many evidences of a very thorough system in all the departments that we visited. Great pains evidently are taken to divert these unfortunate people by furnishing not only entertainment, but employment. Much of it to be sure is, in fact, only killing time, but beyond that is the necessary work of the hospital, which occupies many to good advantage; the laundry, the kitchen, the bakery, and in suitable weather the outdoor work are largely equipped with help who are patients, but whose mental infirmities are not such as to unfit them entirely for the work that is assigned to them.

In good weather patients are allowed and encouraged to be out in the open air, and there is a boat which is used in the summer for occasional outings on the river.

In going about the wards we saw little to indicate the nature of the affliction of the people about us. In the wards where the most restless and disturbed patients were kept there were, of course, here and there, particular cases that we noticed, and sometimes, a little restraint on the part of the attendant, but there was no harshness. All the treatment seemed kindly, and so far as we could tell, judicious. In fact, the perfect freedom from anything that would seem to the patient like restraint was surprising but very gratifying to us, when we thought of the methods (now happily done away with) of years gone by.

We noted the single rooms—all in perfect order. The dormitories were well lighted and well aired; the bedding was arranged properly for airing and the windows were open. We were told that the rooms and bedding remained as we saw them till 4 o'clock in the afternoon, when the beds were made and everything prepared for the night.

We were in the dining-rooms during the mid-day meal and saw the men and women in their respective dining-rooms. The

food on this particular occasion was baked beans; the bread, both white and graham, was good. Butter is furnished at the morning and evening meal. The men's dining-room seemed crowded and not well ventilated, and one of the dining-rooms used by the women, we also remarked, as we passed through it, seemed very close. It was not occupied at the time, and the defective ventilation might be more noticeable if many persons had been eating there. On the other hand, it was very wet out of doors, the atmosphere was heavy, and it was not a good day for ventilation.

As the result of our visit to the St. Lawrence State Hospital, we felt that the institution gave, everywhere, evidence of intelligent care; that the friends of those who are so unfortunate as to be detained there have great cause for thankfulness that such a refuge and such care have been provided, and it was gratifying to us to find so little to speak of except in words of commendation. We felt that the Superintendent was well adapted to his work, and as far as we could judge, he was equipped with a corps of physicians, nurses and attendants equally well qualified for their work, and in closing this report we wish to express our appreciation of the way we were received, and of the uniform courtesy which was accorded us from the beginning to the end of our visit.

November, 1901

FRANK CHAPMAN

GEORGE W. KNOWLTON

GERTRUDE S. E. KNOWLTON

ROCHESTER STATE HOSPITAL.

During the year the visitors of the State Charities Aid Association have made several visits to the Rochester State Hospital, and some of them have been present at patients' entertainments. The officers of the hospital have afforded every facility for thorough examination of the entire hospital and farm and have given, unsparingly, of their own time in helping us.

The wards have been found in good order at each visit.

There is still manifest overcrowding in some of the dormitories, as a comparison of the capacity of the buildings with the actual census shows. The capacity of the hospital is 462, and there were on September 30th 580 patients. The crowding is also evident in the day-rooms in stormy winter weather, when but few of the patients can be out of doors, and this condition must increase the excitement and noise among the disturbed class. The dining-room service is excellent, and the dormitories are kept remarkably clean and free from odor, when it is remembered that this hospital as yet has no detached infirmary wards. The small number of wards prevents complete classification, and the need of economy keeps down the number of nurses and attendants, so that the protection sheet is sometimes used for disturbed patients. The visitors do not wish to imply that they do not recognize the occasional need of mechanical restraint, nor that they do not realize the need of economy in hospital administration, but they believe that the State should provide as many nurses and attendants as are necessary to care for the acute and the disturbed insane, and that the acute class requires a much higher standard of care than do the majority of chronic cases. It is certainly true economy for the State to cure the acute, recoverable cases rather than to have them become life-long dependents of the State by becoming chronics.

A large proportion of the patients are employed daily; the farm and garden afford outdoor work for many of the men, and during the past year 1200 feet of stone road 14 feet wide and the same length of cement walk have been constructed by patient labor. Some low land has been underdrained and is now used for the vegetable garden and seems well adapted to this use. The soap factory continues to furnish employment for a limited number of patients all the year, and is now able to supply all the State Hospitals with laundry, kitchen, bath, castile and shaving soap. An excellent "sapolio" is also made. The carpenter shop, tailor shop, laundry and kitchen furnish employment to many, and it is expected that all the mattresses for the new buildings will be made by patients.

The Nurses' Home is nearly finished and will accommodate 120 employees. The central portion is arranged for married couples, and one wing with smaller rooms is for unmarried men, and the other wing is for single women. This building is a much needed addition to the hospital and will give some single rooms for patients on the men's wards, as the male nurses are now sleeping there. The women nurses now have rooms in a part of the mansard over the women's wards, and it is the opinion of your visitors, as it is of the Superintendent and Managers of the hospital, that this floor should not be used for patients' dormitories. This mansard roof was added to this portion of the present hospital when the institution was the Monroe County Insane Asylum, and it is not properly constructed for the safe accommodation of the insane. Part of it is now used for women patients, and that also should be abandoned, even if this course is not economical.

Contracts have been signed for the construction of new buildings for the accommodation of a little over five hundred patients, consisting of a hospital for acute cases, with medical offices and rooms for scientific treatment and observation of patients, an infirmary, a building for chronic disturbed male patients, and a small hospital for contagious diseases. The original plans for these buildings have been changed by the addition of a third story to the building for the chronic insane, and of two floors over the infirmary for cases of some kind, probably unclassified. This action has been made necessary by the opinion of the Governor, and is undoubtedly for the sake of economy, as it results in the construction of buildings with little regard for the needs of patients. Fortunately, the plans for the hospitals for acute cases and for contagious diseases have not been changed, and these are really the most important buildings in the new group; but it will be interesting to watch the solution of the problems arising in the administration of an infirmary building with two floors built over it for the sake of economy. Your visitors recognize the need of economy in the construction of buildings for the chronic insane, but it seems

a retrograde step that the State which gave to the world the "Willard plan" for caring for the chronic insane in detached buildings, should begin the twentieth century by the construction of three-story buildings for the insane.

October 30, 1901

ROBERT G. COOK, M. D.

EDWINA DANFORTH

HEBE C. HARRIS

S. A. LATTIMORE

LONG ISLAND STATE HOSPITALS

As our new visitors to these institutions were not appointed until the close of the year, the hospitals were visited by the Assistant Secretary, who inspected the hospital in Brooklyn November 6th and the hospital at Kings Park November 8th, 1901. The certified capacity of the Brooklyn Hospital is 1,088 and its census was 1,179. The capacity of the Kings Park Hospital is supposed to be 2,350, and its census was 2,820. Since the division of the Long Island State Hospital into two practically separate institutions, two-thirds of the cases committed from Kings county are sent to Kings Park and one-third to Flatbush. The system is for Kings Park to take 100 consecutive cases, and then for Flatbush to take 50 consecutive cases. This arrangement has worked without friction, and apparently to the entire satisfaction of both hospitals.

Long Island State Hospital in Brooklyn

This institution still manages to present a creditable appearance, notwithstanding the fact that it is housed in obsolete old county buildings with only 12 acres of ground, and is receiving only the most indispensable improvements, in view of the approaching expiration of its lease. There is ground for hope that the 400 women at the Annex will be received at Central Islip in the course of a year or two, and then the old building and land which they occupy could be turned over to the county, which needs the property. It is time to plan for the

choice of a site and the erection of new buildings, to accommodate the 800 patients in the main building and the additional patients that will probably accumulate from Brooklyn to the number of about 400 by the time of the expiration of the lease of the property in 1905.

During the past year few improvements have been made, and probably very little will be done during the next four years. While, of course, it is undesirable to spend much money on these leased buildings, it seems only fair that the State should not allow the property to fall into disrepair, especially as it has the use of the county land and buildings without the payment of rent. One thousand dollars has been spent painting the outside woodwork, and \$2,000 is needed to repair the brickwork. The climate is such that unless the bricks are painted they are in danger of being seriously injured by the dampness, and as the city will probably find some use for these buildings they should be preserved. Among the recent improvements are the refitting of some of the lavatories on the men's side, the furnishing of the Annex with iron bedsteads with woven-wire springs and hair mattresses, and the provision of a pleasant sewing-room for the women on the main floor. The most urgent need continues to be the installation of an internal telephone system, the lack of which causes much delay and many unnecessary steps. Another need is a bakery. The hospital now has no bakery, and the bread is bought, while the making of cake is difficult, and pastry cannot be made at all.

The hospital is obviously overcrowded. Many single bedrooms contain two beds, and in some of the dormitories the beds stand so close together that it is impossible to pass between them, and some of them must be moved out into the hall at night. Not only lack of ward room makes it undesirable to keep so large a population at this hospital, but lack of land makes it difficult to employ the patients sufficiently. This institution has only 12 acres. There is not another State Hospital with less than 150 acres. It is impossible with so limited an amount of ground to give outdoor employment to all the men

who could advantageously be so employed, and unfortunately there is not a sufficient amount of indoor work to compensate for this defect. The only industries are those organized to supply the needs of the institution, and even these are not so fully supplied as they might be. The hospital is already furnished with shoes by the Kings Park Hospital, which contemplates furnishing soap also to State Hospitals in this vicinity. While we commend the enterprising spirit of the Kings Park Hospital in establishing its shoe and soap factories, we cannot but feel that these indoor industries should preferably be established in the hospitals where they are needed to compensate in part for the lack of outdoor work. We would not, of course, advocate the establishment of an elaborate manufacturing plant that could not easily be transferred to the permanent buildings, which it is hoped this hospital will soon have, but we see no reason why the Brooklyn Hospital should not introduce such simple industries as shoe making, and perhaps other industries by which it could supply its own needs, and, if possible, enter into trade relations with other State Hospitals in this part of the State. If it is impossible to follow this course, we would suggest that a simple way out of the difficulty would be to divide the admissions to the Long Island State Hospitals partly on the basis of sex, and to send a larger percentage of women to Brooklyn, and a larger percentage of men to Kings Park. There is no reason why wards now occupied by men should not be used for women instead, for the symmetrical arrangement of the buildings is a matter of no significance.

Long Island State Hospital at Kings Park

No new buildings have been erected during the past two years, but many improvements have been made, including a large amount of grading and road making, improvements to the boiler house and water supply, the fitting up of a laboratory and a room for gynecological examinations, a needle bath for women in the department for acute cases, a bowling alley, a food elevator and serving room for the women in the infirmary at the

central group, some additions to the furniture, considerable outside and inside painting of buildings, and a large addition to the laundry.

The only new building contemplated seems to be a home for nurses. Better accommodations for nurses is certainly an urgent need, but we doubt whether the best plan is to erect a building or buildings for them. We would suggest instead that two of the four brick buildings known as A, B, C and D be turned over to their uses, and the acute patients now accommodated in these buildings be provided for in a hospital especially planned for the care of recent and acute cases. It has long been clear that these four buildings, with their long unhomelike wards, arranged altogether on the single-room system, and their congregate dining-rooms where classification is difficult, are ill adapted to the work of caring for recoverable cases, while their fitness to accommodate employees is proved by the fact that wards in two of them have been so used for several years. The plans for hospitals for acute cases have been perfected during the past year, and the State is now in a position to erect model buildings for this class. It would seem that the largest hospital in the State, with its hundreds of acute cases, should be provided with a suitable building for the most important part of its work. As it is considered undesirable to increase the capacity of this hospital, it can hardly be expected that both a nurses' home and a building for acute cases will be provided, and if both purposes can be met by arranging for one new building, this is surely a course which is economical for the State, as well as advantageous for the hospital. We recommend, therefore, that this most desirable arrangement be carefully considered, and, if possible, carried into effect.

The grade of nurses and attendants seems to be improving. A special effort is made to attract a higher class of young men and women to the hospital service by advertising in papers in the rural districts in this State and in the New England States. This winter there are 19 seniors and 29 juniors in the training school. While few of the nurses have rooms apart from the

wards, the admirable employees' club house furnishes a pleasant retreat for free hours.

The patients seem to be well employed. There is plenty of outdoor work, not only in farming operations and caring for the stock, including 140 cows, but also in grading, digging and road building. The indoor industries are also well developed. A shoe factory in the basement of the central group employs about 30 patients regularly, who make boots and shoes for this hospital and the hospitals at Brooklyn and Central Islip. It is planned to establish a soap factory, and this hospital will try to sell soap to the hospitals in the eastern part of the State, as the Rochester State Hospital does in the western part of the State.

The entertainment of the patients seems to be well provided for. There are several billiard tables and a bowling alley. There is a baseball team and an orchestra among the employees. The formal entertainments are generally given two or three times because of the very small size of the entertainment hall. The hospital certainly needs a large centrally located building for this purpose.

The dietary continues to be a matter of careful study. Acute patients are put on what is called employees' diet which is practically the same as that furnished the nurses and attendants. The infirmary patients have a lower diet and the working patients have the regular diet with the addition of meat and some other articles. There is also a special diet for the sick adapted to the needs of individuals.

The general appearance of the wards has improved during the past year. They appear to be somewhat better furnished, though they still seem bare when compared with the wards of other hospitals in this part of the State, such as the Brooklyn Hospital and the Manhattan State Hospital West. The brick buildings A, B, C and D have never been given their due allowance of furniture, but it would take a great amount of furniture to give these long corridor wards a homelike appearance. The women patients might well be taught to make carpets and

mats as they do at the Manhattan State Hospital, West, and so improve their surroundings without waiting for help from the public treasury.

November, 1901

MARY VIDA CLARK

MANHATTAN STATE HOSPITALS

As the Manhattan State Hospital was divided by the Legislature of 1900 into three hospitals separate in everything except their common Treasurer and Board of Managers, we report on each of the three hospitals separately. We did not secure regular visitors for the Manhattan State Hospital, East, and the Manhattan State Hospital at Central Islip until the end of the year, and so can present only incomplete reports on those institutions.

Manhattan State Hospital, East

This hospital has a capacity of 1,700 and is accommodating about 1,850 patients. A recent important change is the transfer to this department of 550 women patients from the Blackwell's Island division of the Manhattan State Hospital, West. These women occupy the old East building, which is greatly overcrowded. The introduction of women patients makes a hospital more normal and tends to bring a homelike element into the hospital life. This is already evident in the employment of women nurses in the men's hospital wards—an improvement which we have been urging for four years.

Few alterations or additions to buildings or equipment have been made at this hospital, and many are needed. With the exception of the excellent new hydrotherapeutic apparatus, the six new water sections, and the bowling alley, little has been done to improve the buildings since the State assumed charge of them. The wards are somewhat more cheerful in appearance, but their old fashioned style of construction makes them necessarily gloomy and unhomelike. This hospital needs a new building like the new branch building at the Manhattan State Hospital, West, where the care of the acute could be cen-

tralized. More of the wards and dining-rooms should be put in charge of women nurses and attendants, and a greater effort should be made to furnish attractive surroundings. The women in the East building should be encouraged to make mats, curtains, etc., so that their wards might come to resemble those for women in the West Hospital. A generous supply of plants has been furnished here with excellent effect, but the State has not yet provided the furniture and pictures needed, and the walls are consequently bare and cheerless. This building would be improved by the addition of piazzas with long windows opening upon them, where the patients could sit in warm weather and walk in cold weather. Most of the women here are, however, supposedly chronic cases, and a large proportion of them are old and unappreciative.

Manhattan State Hospital, West

The census of this hospital must still, unfortunately, be kept far ahead of the capacity; the former is over 2,000, the latter under 1,700. The overcrowding is noticeable everywhere. The hospital has been relieved of the care of the Blackwell's Island patients, 350 of whom have been transferred to Central Islip and 500 to the Manhattan State Hospital, East.

The general appearance of the interior of the buildings has greatly improved during the past year. Much fresh paint, new furniture, pictures, plants, birds, etc., have made the wards more homelike. The most important improvements of the past year seem to be a new two-story dining-room building for patients in the Verplanck building, which is now nearing completion; a new one-story dining-room building, also nearing completion, for the patients in the old branch buildings; an underground conduit between the two kitchens and the two outside dining-rooms they serve; an underground passage between the new dining-room building and the Verplanck building; an ice making and cold storage plant; a greenhouse; a bowling alley; large windows in single bedrooms and in dayrooms of branch buildings, where there were formerly small high win-

dows; a two-story solarium on the cottage for consumptives; new plumbing in the Verplanck building.

When the division of the Manhattan State Hospital took place, 200 male patients were assigned to the Manhattan State Hospital, West. These are all able-bodied chronic working patients, and for them have been set aside the four pavilions at the northern end of the island. One of these pavilions serves as their dining-room, and the other three as dormitories. They have been painted and furnished and present a very pleasing appearance considering their unsuitable construction and arrangement.

Since the occupation of the new branch building for the acute and sick, the former reception cottage has been turned over to the uses of the patients suffering with pulmonary tuberculosis. The partitions inside have been taken down, leaving two large wards, one on each floor. Eighty-six patients are accommodated here, the more hopeful cases being on the ground floor, and the less hopeful and bed patients on the upper floor. The two-story solarium extending along the south side of this building is a very great improvement. It is furnished with easy chairs, tables, plants, etc., and here the patients sit all day. On the upper floor bed patients are often found lying in bed in the solarium, getting an air bath. The fresh-air treatment is resorted to in the care of these patients to a very considerable degree, with excellent results.

The new two-story dining-room which is being constructed for the patients in the Verplanck building, and for the male patients, will leave the old dining-room building unoccupied. The plan is being considered of fitting this up for the uses of the Pathological Institute. On one of the floors of this building are large brick ovens, and the Managers asked the Commission for permission to turn this floor into a bakery, but the money needed was not allowed. The hospital is now dependent for much of its baking upon the East Hospital, as the West Hospital has no bakery. The plan has also been considered of turning this building into a drug manufactory, but it

seems doubtful whether it would be quite safe to use for that purpose a building so closely adjacent to residence buildings. The old branch buildings have been very much improved by having large windows cut through into single bedrooms and dayrooms, where the small, high windows were complained of in previous reports. The new dining-room building, which is being constructed in connection with the old branch buildings, will accommodate the patients who are now dining in ward dining-rooms. This one-story one-room building will be a great improvement over the present dining-rooms, but it seems unfortunate that the windows should be so high that it will be impossible for patients to see out while they are sitting at table. This dining-room is connected by an underground conduit with the kitchen of the new branch building. The new branch building seems to be excellent. It is composed of six wards and accommodates 325 patients. The smallest of these wards is a reception ward, where only 37 patients are treated. This is extremely pleasant, with a large, light, well-furnished sitting-room. The largest of the wards in this building is one on the second floor for cases of acute malancholia. Here 103 patients are accommodated, for the most part in two large dormitories. At the further end of this building are the hospital wards for the acute and sick, the most serious cases being on the first floor, and the convalescent cases on the second floor. Here there is an operating room, and at the time of the most recent visit one of the physicians was engaged in performing an operation. There is also a room set apart for confinement cases, of which there are said to be about fifteen a year. Another room contains the static electric apparatus for the treatment of cases tending towards dementia which are benefited by stimulation.

On arrival at the hospital patients are conveyed immediately to the new branch building, where they are received in one of the small rooms in the reception ward. They are put to bed for examination, and, if they are able, get up the next day. If not, they stay in bed as long as necessary. The acute cases are not

all cared for in this building. Those who are disturbed are sent to the old branch building, where there are single rooms for such cases. This building for the disturbed is divided into two parts—one end being for acute and one end for chronic cases, so that there is a certain separation here. All cases of acute sickness, as well as the acute insane, are cared for in the new branch building. On the day of the most recent visit one ward was quarantined, owing to the presence of diphtheria, of which there had been five cases. In the branch buildings for the acute disturbed patients experiments are being made as to the effect of colors on their condition, single rooms being painted dark or bright colors to secure quieting or stimulating effects on the nervous system.

The class of the nurses and attendants attached to the hospital seems to be improving; but the Manhattan State Hospital can hardly compete with general hospitals or the State hospitals up the State, on account of the comparatively low wages paid. There are about 35 in the training school—16 in one class and 19 in the other. One hundred and fifty of the attendants are provided for in the attendants' home, forty-two lodge in the cupola of the Verplanck building, and the head nurse of each ward has a room on her ward. The juniors are given service in various parts of the hospital, and the seniors serve in the new branch building, where they have training in the care of the acute sick, including operative cases, as well as care of the acute insane.

The arrangements for entertaining the patients seem satisfactory. The hospital has an orchestra composed of women employees with a man employed as leader. This orchestra plays twice a week, and the band from the East Hospital plays once a week. The chief entertainments are the dances which are given in the old entertainment room at the Annex. A bowling alley has been provided in the basement of one of the old branch buildings and it is said to be much enjoyed by the women. In the convalescent ward of the Verplanck Building there is a pianola. The women enjoy the cultivation of flowers, and some of them work in the new greenhouse.

The occupations appear to be well developed. It is said that 83 per cent. of the women are employed in some way. There are 150 women employed in the Industrial Building, where a great variety of industries are carried on, including the making of mattresses, mats, rag carpets, rugs, baskets, clothing and embroidery. The sewing machines are run by machinery. Most of the patients occupied here are chronic patients, who work regularly every day. Many of them are instructed in the various industries. The women also do the housework and serve in the dining-rooms. Women work during the day in the pavilions occupied by the men while they are out in the grounds. They wait on table, assisting the nurses, who eat afterwards. In the new branch building, at the time of the most recent visit, the cases of acute melancholia seemed to be engaged in picking over hair for the mattresses, while the patients in the reception ward were sewing, reading, or embroidering. In the hospital ward one or two women were sewing in bed.

Patients are seldom found under restraint of any sort. At the time of the most recent visit there seemed to be very little excitement or disturbance in the wards, though in the wards for the disturbed patients there was perhaps an unusual occasion for difficulty, owing to the fact that some of the wards were being painted, and so the patients were crowded into other wards. It is customary to hold disturbed patients or to reduce their excitement by putting them to bed or by hydrotherapeutics, or by other physical treatment.

The food and dining-room service receive careful attention. The dining-room in the Annex Building has been improved by providing round tables; such tables will be placed in the new dining-rooms. There are practically four diets for the patients—the ordinary diet, which is prepared in the kitchen near the Verplanck Building; the diet for the acute patients, which is practically the employees' diet, some additions to the regular diet for working patients, and a special diet for the sick. In the old ward dining-rooms of the branch buildings agate-ware is still used and does not look very well. This will be replaced

by better ware when the new dining-rooms are fitted up. The patients are served by the nurses assisted by other patients. Paper napkins are used at table, linen being reserved for the trays. The butter is rolled into pats.

Many improvements to buildings are needed. There should be a large amusement hall for the patients of this hospital, and it might be economical for the State to build one building of this sort which would serve for both the East and West Hospitals. The branch buildings are unnecessarily unattractive in appearance. If piazzas were added on the sides and day-rooms at the ends, the effect would be much more cheerful. The dining-room on the first floor of the Annex is somewhat dark, owing to the smallness of the windows. If a trench were dug about the walls the windows might be lengthened and the underground appearance done away with somewhat. There should be either a transfer of about 500 patients from this hospital to Central Islip, or else new buildings should be erected to accommodate the overflow. As this hospital is no longer transferring cases regularly to other places, it is becoming more and more overcrowded, and probably some arrangement should be made by which Central Islip could receive a larger number of women.

Manhattan State Hospital at Central Islip

At the end of the year 1901 this hospital is accommodating nearly 2,500 patients, of whom about 1,400 are at the old or North Colony and about 1,100 at the new or South Colony. The population of the South Colony will be more than doubled with the completion of the buildings in the course of the ensuing year, and the Manhattan State Hospital at Central Islip will be the largest hospital in the State, as it will have a population of at least 3,700. The following description of the South Colony appeared in our seventh annual report:

“The new colony is situated about a mile from the present colony, and is planned to accommodate double the number of patients. This colony is to consist of two double groups of connected buildings. Each double group is arranged upon a plan

somewhat similar to that of the new buildings at Kings Park. One vast kitchen will cook for 1,500 patients and two great congregate dining-rooms will accommodate 750 each. The patients' quarters, consisting of day-rooms on the first floor and dormitories on the second floor, extend from the dining-rooms for a quarter of a mile in each direction. Patients living at the ends of the building will thus have a walk of a mile and a half every day in going to and from their meals."

Such mammoth institutions do not furnish desirable homes for the insane, but are cheaper than the small buildings demanded by modern science, and as economy seems now to be the prevailing demand in this State, this is the sort of accommodations that are likely to be provided for this unfortunate class. It is just to say that the maximum of light and air seems to have been provided, and that the wards are as cheerful and homelike as such a construction will permit. Some defects of construction have, however, already become apparent; for instance, the patent pavements in the connecting corridors became swollen and broken before the buildings were occupied, and the occupation of sections of the buildings has been necessarily delayed on this account. As the patients in the buildings of the new colony had been received only a few days previous to our most recent visit from the Manhattan State Hospitals, East and West, and from the Hudson River, Buffalo and other State hospitals, to which patients from this district had been transferred for lack of accommodations at the Manhattan State Hospitals, it was impossible to judge fairly of the conditions of their life in this their new home. While the class of patients appeared to be particularly unintelligent and difficult to care for, their general appearance was highly commendable to those in charge. In many other ways this hospital seems to be doing admirable work. A large proportion, perhaps 75 per cent., of the patients are regularly employed, and much effort is made to arouse and amuse them in their free hours. In addition to the usual forms of entertainment, there have been organized here semi-military exercises and inspection for the men patients,

which not only amuses them, but results in an improvement in their bearing and gait and the neatness of their dress. Some adaptation of this exercise might be made for the women, and would doubtless be beneficial to them.

Much attention is being paid to the important matter of diet. The admirable bread tins invented by the Superintendent are still in use, and the bread baked in these small cylindrical tins is more palatable and more wholesome than ordinary loaves. So much economy of waste in the kitchen has been effected by careful attention to this department that while the hospital formerly kept 400 pigs, it can now maintain only 200, although the population of the hospital has considerably increased.

With the completion of the buildings now under way and the provision of a suitable laundry building, which is now the most urgent need, the Manhattan State Hospital at Central Islip will be an extensive, well-equipped and well-managed hospital. In view of its growing importance, it would seem desirable that it should be put on a par with other State hospitals and be allowed to receive patients on original commitment, instead of relying altogether on transfers from the Manhattan State Hospitals, East and West, and other State hospitals. We would recommend the adoption of some such arrangement for the distribution of patients between this hospital and those on Ward's Island as that which works so satisfactorily in the case of the Long Island State Hospitals at Brooklyn and Kings Park.

December, 1901

FLORENCE M. RHETT
MARY VIDA CLARK

GOWANDA STATE HOMEOPATHIC HOSPITAL

The Gowanda State Hospital was visited on Thursday, December 19, 1901. There was no notice of the intended visit, so there was no opportunity for special preparation, but everything was found in its usual satisfactory state. The hospital is located on a good farm of about 500 acres belonging to the State. The present buildings seem to be well adapted for the purpose

intended, so far as general plan is concerned, but are badly crowded and inadequate to care for the patients that are demanding admission.

Two new buildings are now in process of construction, one for male and the other for female patients. There is at present an administration building in front, with wards for male and female patients extending out on each side, with dining-rooms, kitchens, and store-rooms in the rear, all connected by corridors (yet the inmates kept well separated), and provided with metal covered doors to cut off connection in case of fire. The buildings are well supplied with hose inside and out to be used in case of fire. A tank is kept constantly filled as a reserve supply, which gives a pressure of 60 pounds to the square inch, and the whole system is connected with a powerful force pump, located in the boiler house at some distance from the main buildings. All parts of the buildings were well lighted, warmed, and ventilated, being remarkably free from bad odors. The floors and all woodwork were scrupulously clean.

In addition to the main buildings, there is a brick laundry; a boiler house in which are located the steam and electrical plants; a frame cottage which is used for female patients who need special care, and which provides a pleasant home for about twenty; a good sized farm house, occupied by the farmer and assistants, and two good barns. There are about fifty cows kept on the farm, which supply milk for the large family of patients. The barns seem to be in good sanitary condition, the cows well fed and cleanly kept.

A large quantity of vegetables and fruit are produced on the farm. The management appears to be good and the work thoroughly done.

At present there are 169 male and 185 female patients being cared for. This is more than the present buildings can properly accommodate. The crowding is worst in the dormitories, particularly in the female wards, it being necessary to place some beds in the corridors.

A pleasant lecture room is used for a training school for

nurses. The course is two years in length. The instruction covers the usual subjects, though little practice is given in surgery. There are usually 8 or 10 pupils. There are 5 head nurses and 11 head attendants employed. They lodge in comfortable dormitories over the dining-room away from the wards.

They are apparently doing their work well. It seemed to me, however, that the wages paid, particularly to the male attendants, \$20 to \$24 per month, are not large enough to secure continued good service. It is essential that these positions should be held by trustworthy and capable men.

An effort is made to provide something in the way of instruction and entertainment for the patients. A fair library is well patronized. Papers and periodicals are supplied. There is a pool table and other opportunity for games indoors. Dances are held regularly every two weeks. There are a number of musical instruments through the buildings. The corridors and assembly rooms are well fitted out with pictures on the walls and good furniture. Religious services are held every Sunday, consisting largely of singing. It is the custom to have the pastors of the neighboring churches, including the Roman Catholic, look after the work, each attending to it for one week at a time. This includes visiting the seriously sick when desired, and attending to the burials. An undertaker from Gowanda takes charge, and the burials are made in the village cemetery.

A number of the male patients work on the farm, and female patients in the laundry—some also work at dressmaking, tailoring, etc. The Superintendent says that a physical examination is made in each case, and only those who are sufficiently strong are allowed to do any work. The general appearance of those who were occupied in this way would indicate that the work was beneficial rather than otherwise.

There was only one patient under restraint on the day of my visit. This man had on long mittens extending up to his arms, and fastened together at the ends, to prevent him from striking others. There is a small ward devoted to the use of noisy and violent cases. Patients who can be trusted are allowed to walk

about the grounds and be out of doors as much as the weather will permit.

All days, except Saturdays, Sundays and regular holidays, are visiting days. The Superintendent stated, however, that if a friend came from a distance an interview would not be denied on any day. Patients are allowed to write one letter every two weeks, and oftener at the discretion of the doctors. The clothing furnished is of sufficiently good quality and all right for the season. The underclothing is well laundered, sufficient in amount, and heavy enough for winter.

The plumbing is good throughout the buildings. There are facilities for hot and cold water baths in tubs and by showers. The rule is to give each patient a shower bath twice a week, and it is stated that a nurse or attendant looks after it in every case.

The management of the dormitories is exceptionally good. I found no bad air or unpleasant odors in any of them. The bedsteads are iron. There is a woven wire spring and good hair mattress for each, with necessary blankets, etc. The sheets and pillow slips are changed as often as once a week. It was a cold winter day when I visited the hospital, and on entering the dormitories, which are used only at night, I found the windows open and fresh air circulating through the room. The mattresses were all thrown over the foot of the beds, the pillow slips taken off and the sheets and blankets neatly folded. The pure outside air was doing its work. The beds are not made up until towards evening. When the bedding has secured a thorough airing, the windows are closed and the temperature raised to the right condition for sleeping. An attendant watches in each dormitory during the night, the head nurse being within easy call.

The quality of the food and other supplies is good—of about the same standard as in other State institutions. The cooking seems to be well done. The bill of fare for a week shows a fair variety of good, wholesome food. It is stated that no difference is made in the quality of food supplied to different

classes of patients, only that in cases of sickness, or in convalescence, some changes from the regular bill of fare are made. Elaborate preparations were being made in the kitchen for the Christmas dinner.

The tables in the dining-room are round and seat six or eight persons. The tableware is good. The food is served mainly by attendants, and comes in hot. I saw the patients at dinner. Those who came to the dining-room seemed quiet and orderly.

The Superintendent says that new cases are committed usually by overseers of the poor, or county superintendents. The homeopathic treatment is followed. Nearly all new cases are kept in bed for a few days in order to rest and quiet them, and for the purpose of watching them and getting a good understanding of their condition so that the proper treatment can be decided upon. Under the present crowded condition of the hospital, it is not possible to provide separate apartments and needed accommodations for the more hopeful cases, but the new building, when completed, will supply these wants very well.

There is no woman physician in the hospital. There should certainly be one when the numbers are increased.

The buildings are surrounded with grounds that are beautiful by nature, but they could be improved by grading, the planting of trees, shrubs and flowers, and the judicious locating of walks and drives. There should be a moderate sum of money supplied to permit the doing of this work.

December, 1901

W. E. WHEELER

APPENDIX A

EXTRACTS FROM THE BY-LAWS OF THE STATE CHARITIES AID
ASSOCIATION

XIV

COMMITTEE ON THE INSANE

It shall be the duty of the Committee on the Insane:

1. To keep itself informed of the number and condition of all dependent insane persons in the State of New York.
2. To devise means for alleviating the mental and physical sufferings, and for contributing to the comfort and welfare of these afflicted persons.
3. To obtain for them, in State hospitals, medical treatment by skilled alienists, trained nurses and a high grade of attendants; as also to secure for them the highest standard of curative treatment known to the medical profession.
4. To inaugurate and maintain, for convalescents leaving hospital, who may be friendless, a system of "after-cure," whereby they may be strengthened in health, protected and cared for until able to support themselves.
5. The Committee shall advocate, for the benefit of all classes of patients, the system of *State care* in State hospitals for the dependent insane, as opposed to the system of *county care* in county poorhouses and county asylums.

XVIII

VISITORS TO STATE INSTITUTIONS

There shall be visitors of the Association for all charitable institutions owned by the State in the State of New York, including State hospitals for the insane, whose duty shall be to visit, inspect and examine, on behalf of the Association, the institutions to which they are assigned, and to co-operate, as far as may be practicable, with the managers and superintendents in promoting the welfare of the inmates of these institutions. Visitors shall correspond with and shall make monthly

and annual reports to the Secretary of the Association. They shall work under the control and by the direction of the Board of Managers.

XIX

REPORTS

The Association shall make an annual report of the results of its visits and inspections to the State Board of Charities upon matters relating to the institutions subject to the visitation of the Board, and an annual report to the State Commission in Lunacy upon matters relating to the institutions subject to inspection or control by the Commission.

These reports shall be made on or before the first day of November for each preceding fiscal year.

The report to the State Board of Charities shall include the Treasurer's report. (*Chapter 546, Laws of New York, 1896.*)

APPENDIX B

CERTIFICATE OF INCORPORATION—STATE CHARITIES AID ASSOCIATION

We, the undersigned, being of full age and citizens and residents of the State of New York, do hereby associate ourselves together to form an incorporation under the provisions of chapter 319 of the Session Laws of New York of the year 1848 and of the acts amendatory of the same.

We do further certify that the name or title by which the society is to be known in law is the "State Charities Aid Association;" that its principal place of business is in the city of New York. Its particular business and objects are to aid and promote the improvement of the mental, moral, and physical condition of the inmates of all public charitable institutions in the State, and in particular of State institutions, county poor-houses and city almshouses, and to induce the adoption by the community at large of such measures in the organization and administration of both public and private charity as may

develop the self-respect and increase the power of self-support of the poorer classes in society; that the number of its trustees, directors, or managers, is fifteen, and that their names for the first year of the society's existence are Louisa Lee Schuyler, Howard Potter, Gertrude S. Rice, Theodore W. Dwight, Laura d'Orémieulx, James Gallatin, Florence Bayard Lockwood, D. Willis James, Elizabeth C. Hobson, John Crosby Brown, Sophie E. Minton, Henry E. Howland, Sarah T. Sands, John A. McKim, Joseph H. Choate.

In witness whereof we have hereunto set our hands, this 22d day of December, 1880.

LOUISA LEE SCHUYLER
 HOWARD POTTER
 GERTRUDE S. RICE
 THEODORE W. DWIGHT
 LAURA D'OREMIEULX
 JAMES GALLATIN
 JOHN CROSBY BROWN
 FLORENCE BAYARD LOCKWOOD
 D. WILLIS JAMES
 ELIZABETH C. HOBSON
 SOPHIE E. MINTON
 HENRY E. HOWLAND
 SARAH T. SANDS
 J. A. MCKIM
 JOSEPH H. CHOATE

STATE OF NEW YORK,
 City and County of New York. } ss.:

On this 22d day of December, 1880, before me personally appeared Louisa Lee Schuyler, Howard Potter, Gertrude S. Rice, Theodore W. Dwight, Laura d'Orémieulx, James Gallatin, John Crosby Brown, Florence Bayard Lockwood, D. Willis James, Elizabeth C. Hobson, Sophie E. Minton, Henry E. Howland, Sarah T. Sands, John A. McKim, and Joseph H. Choate, all to

me known, and known to me to be the individuals described in, and who executed, the foregoing instrument, and severally acknowledged that they executed the same.

CHAUNCEY O. MIDDLEBROOK

Notary Public

COUNTY OF NEW YORK.

I hereby consent to and approve of the filing of the within certificate.

C. H. DONOHUE

NEW YORK

APPENDIX C

RIGHT OF ENTRANCE LAW—STATE CHARITIES AID ASSOCIATION

General—All Counties—Laws of New York

CHAP. 546, LAWS OF 1896

AN ACT relating to state charities, constituting chapter twenty-six of the general laws

Became a law May 12, 1896, with the approval of the Governor. Passed, three-fifths being present

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

CHAPTER XXVI OF THE GENERAL LAWS

STATE CHARITIES LAW

ARTICLE II

State Charities Aid Association

Section 30. Visits by the state charities aid association.

31. Duties of officers in charge of institutions; enforcement of orders.

32. Annual reports.

Section 30. Visits by the state charities aid association.—Any justice of the supreme court, on written application of the state charities aid association, through its president or other officer designated by its board of managers, may grant to such persons as may be named in such application, orders to enable

such persons, or any of them, as visitors of such association to visit, inspect and examine, in behalf of such association any of the public charitable institutions and state hospitals for the insane owned by the state, and the county, town and city poor-houses and almshouses within the state. The persons so appointed to visit, inspect and examine such institutions shall reside in the counties from which such institutions receive their inmates, and such appointments shall be made by a justice of the supreme court of the judicial district in which such visitors reside. Each order shall specify the institution to be visited, inspected and examined, and the name of each person by whom such visitation, inspection and examination shall be made, and shall be in force for one year from the date on which it shall have been granted, unless sooner revoked.

§ 31. Duties of officers in charge of institutions; enforcement of orders.—All persons in charge of any such institution shall admit each person named in any such order into every part of such institution, and render such person every possible facility to enable him to make in a thorough manner such visits, inspection and examination, which are hereby declared to be for a public purpose, and to be made with a view to public benefit. Obedience to the orders herein authorized shall be enforced in the same manner as obedience is enforced to an order or mandate by a court of record.

§ 32. Annual reports.—Such association shall make an annual report to the state board of charities upon matters relating to the institutions subject to the visitation of such board; and to the state commission in lunacy upon matters relating to the institutions subject to the inspection and control of such commission. Such reports shall be made on or before the first day of November for each preceding fiscal year.

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